PUBLIC HEALTH REPORTS

VOL. 40 JULY 17, 1925 NO. 29

THE RAT-PROOFING OF VESSELS

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After a number of experiments and considerable study begun 13 years ago, when the authors expressed their conviction that fumigation of vessels for rats could not be efficiently done unless the vessel was extensively prepared,[1] it was decided about a year ago to begin the rat-proofing of vessels at New York. Preparation for fumigation consists in opening up limbers, pipe casings, and similar dead spaces in order to let the gases penetrate into them and in blocking runways by which rats could escape. It is in itself a partial rat-proofing from which a more complete and permanent system has naturally evolved.

At the request of the general manager of the line, one of the finest and largest passenger vessels afloat was chosen for a demonstration. For several months before beginning the work, conditions on the vessel were studied by almost daily observations and trapping. Intensive trapping reduced the number of rats appreciably, and observations allowed their habits and movements to be charted with reasonable accuracy. As the rat-proofing progressed month by month, trapping results fell practically to zero, and the testimony of persons on board and the absence of rat signs finally indicated that the rats had practically been eradicated. The response to this demonstration has been such that we have a large number of requests to begin on other ships, among which are many of the finest vessels afloat.

The term "rat proof" has for some time been applied to buildings and is recognized as a valuable measure against bubonic plague and rat depredations. Rat-proofing may be permanent or temporary. Permanent rat-proofing must be incorporated in the original building, or requires considerable structural change, whereas temporary rat-proofing may be secured by blocking off rat harborages and rat runs.

The general principles of rat-proofing are the same whether on land or sea, but their application may differ. For instance, we rat proof buildings largely to prevent the gnawing and burrowing of the gray rat (*norvegicus*), whereas these rats are not common on shipboard, where burrowing is impossible.

It may be well to define the term "rat proof" as it is being used in the port of New York. A rat-proof ship is one on which it is

[1] Fumigation of vessels for the destruction of rats. Pub. Health Repts., June 20, 1913. Reprint No. 132

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impossible or difficult for a rat to hide, nest, or move about in search of food. This condition may be approximately reached when the ship is first constructed (permanent rat-proofing), or it may be accomplished by abolishing dead spaces or blocking them off by material impervious to rats, at the same time stopping all rat runs. In the complicated structure of a modern ship this requires a large amount of detailed work, most of which is done with light material requiring regular inspection and repair (secondary or temporary rat-proofing).

Rats may get on a rat-proof ship, just as they may enter a rat-proof building; but once on such a ship it will be impossible or difficult for them to hide, except in cargo or stores, which will afford only temporary shelter, and they can not move from one compartment to another in search of food or water. In other words, they will be confronted with an acute housing problem, high cost of living, and poor transportation between home and business (food getting). Laboring under these disadvantages, rats will be exposed to acute rivalry among themselves, to their enemies, and to starvation. They will breed with difficulty, and instead of multiplying will decrease or even disappear.

A rat-proof ship will have less destruction from rats, will be cleaner, will be preferred by passengers and shippers, will be less likely to carry bubonic plague, and consequently less liable to the delays and expense of quarantine.

The tendency of modern building, both on land and sea, is already toward rat-proof construction. On shore this is primarily to prevent fire; on the sea it is to prevent fire and to increase strength and safety. Ships have been built within the past few years that are nearly, if not entirely, rat proof, although probably not designed with this object in view. If the general principles are understood by the naval constructors and are incorporated in the original design of a modern vessel, rat-proof construction would cause but small or no additional expense.

The specifications given in this article are recommended for the careful consideration of those constructing or operating ships. If operators would include in contracts for new construction or for structural repairs the words "all work to be rat proof," a forward step would be taken. It is our hope that this article may be used to define the meaning of such a requirement.

The work in New York has so far been the correction of defects in ships already constructed in order to make them unsuitable for the existence of rats on board. Essentials for such secondary rat-proofing are given in these specifications, but can not cover all details, as in practice defects must be pointed out one by one, and the correction of each must be made under the direction of some one thoroughly trained in this particular line of work.

The necessities for rat life are—

1. Food and drink.
2. Hiding and nesting places.

Our problem, then, is to deprive rats, as much as possible, of one or both of these necessities; at the same time to separate from their sources of food any home they may find and to make it difficult for them to travel from one to the other. To this purpose—

1. All foodstuffs, whether new or garbage, should be in rat-proof containers or kept within rooms devoid of rat harborage and into which rats can not come from without.
2. All small inclosed spaces should either be abolished or, if this is not possible, should be blocked off by material impenetrable to rats at all points where a rat may get a foothold in order to gnaw through.
3. Large openings should be closed by screening or by doors or windows that fit and that are impenetrable to rats at gnawing levels, and they should be kept closed; and all small openings should be permanently screened or closed.

Secondary rat-proofing of ships requires painstaking attention to a large number of details which, in most instances, after correction, must be inspected and repaired periodically. The cost, however, is comparatively small.

The method at present in operation at the New York Quarantine Station is as follows: When rat-proofing has been requested, a survey is made by the foreman of rat-proofing and one of the authors of this article (B. E. H.), accompanied by the captain or first officer of the vessel and an officer of the company responsible for repairs. A report detailing and numbering each item to be changed is made out in quintuplicate, one for the company manager and one for each of the persons making the inspection. The work is then done by one or more carpenters and ironworkers, who correct the defects, item by item. The company supplies the material and labor, the ship's officer supervises the work, and our foreman makes daily inspections giving detailed instructions. The work may proceed every day without interfering with any operation of the ship, except that a few items, especially in the holds, must be corrected while the vessel is in port.

Rat-proofing of ships at New York is in actual operation. It is giving gratifying results and is receiving the support of ship operators.

Specifications

The following general specifications have been drawn up to cover the principle requirements for permanent rat-proof construction of ships and as a general guide for the rat-proofing of ships already constructed.

SPECIFICATIONS FOR MATERIALS

The term "sheet metal" for collars around pipes, etc., means a No. 10 or No. 11 Stubb gauge galvanized iron or equivalent.

"Sheet metal" for lining for bins, "metal" strips for pipe casings, etc., mean No. 13 or No. 14 Stubb gauge galvanized iron.

"Perforated sheet metal" means No. 10 or No. 11 Stubb gauge, with stamped perforations, openings not larger than one-half inch.

"Light wire screening" means No. 10 or No. 11 Stubb gauge, mesh one-half inch or less.

"Heavy wire screening" means No. 8 Stubb gauge, mesh one-half inch or less.

Light wire screening may be used unless heavy is specified.

I. HOLDS

1. FLOORING AND LIMBERBOARDS

(*a*) Make boards tight fitting. Repair or replace broken and defective boards.

(*b*) Close open spaces on both sides of ship between tops of tanks and floors of holds with heavy screen material.

2. PIPE CASINGS

(*a*) *Eliminate square wooden* casings in vessels under construction, and on vessels in commission, where practicable. Substitute therefor open steel beams for sides of casings, with steel staging strips placed ladder fashion, 6 inches on centers, for front.

(*b*) *If wooden* casings are retained, replace broken boards, make casings tight, and closely fitted to floor and ceiling.

Screen any open ends.

Protect the bottoms and tops of each section of casing with sheet metal strips at least 6 inches wide, fastened to the three sides of casing.

Treat horizontal or cross-section casings in the same manner as vertical ones, as far as applicable.

Install two well fitting hinged doors in vertical casings; doors to be 18 inches high and located 2 feet and 6 feet, respectively, from deck. Provide hooks to fasten same. Removal panels on screws may be substituted.

3. BILGES

Close with heavy screens all openings under "screen bulkheads" and in stringer beams adjoining bulkheads.

Install flanges where pipe lines pass through bulkheads or deck flooring.

Repair any defective flanges or metal collars.

II. SHAFT ALLEY

Make all covers to shaft alley escapes tight fitting.

Screen underside of grating covers to shaft alley escapes.

Make doors from engine room to shaft alley tight fitting and in addition install screen doors with door checks.

III. ENGINE ROOM, FIRE ROOM, AND BUNKERS

Repair all doors to make tight fitting.

Install screen doors, equipped with door checks, for use in openings where solid door can not be kept closed.

Screen fiddley, skylights, and ventilators.

Elevate tool and other lockers at least 2 feet from floor. Locate lockers in as open space as possible, avoiding dark corners and out-of-way places.

Make lockers with shallow shelves and sloping tops, and install tight-fitting doors equipped with snap fasteners.

Screen defects in lockers that can not be rebuilt.

IV. FORE PEAK AND AFTER PEA..

1. FORE PEAK

(*a*) Discontinue use of fore peak for storage of boatswains' and other stores.

Close hatch with tight-fitting cover. Close any other openings into the peak.

(*b*) Until such action is taken, make hatch covers and gratings fit tightly.

Replace any broken or defective planks of hatch cover.

Screen underside of hatch gratings.

Keep hatch cover or grating on except when in actual use.

Clean out stores, replace and rearrange stores, separating them into smaller units instead of mass heaps.

Install, where practicable, shelves, racks, and hanging devices for orderly arrangement of these stores.

2. AFTER PEAK

(*a*) Treat hatch covers and gratings as suggested for fore peak.

Eliminate double floors, substituting open gratings made in sections which can be easily handled. Gratings to be of type to lay flat on floor.

Install open shelves, hanging devices, and racks for open and orderly storage of supplies.

Make crates, screened on inside, with tight-fitting hinged tops, for storage of canvas articles and small coils of rope. Fasten floor

boards of crates on outside of same, so crate will rest flat on deck, leaving no underneath space.

Make wooden partitions fit tightly and snugly to floors and ceilings. Repair all defective boards. Plug and screen all holes and cracks. Close openings around beams and pipes with metal collars or screens. Screen edges of partitions which touch sides of ship, unless they fit snugly.

Install screens over partitions which have open spaces between tops and ceilings.

V. PROVISION STOREROOMS

Make all doors tight fitting. Equip main entrance doors with door checks or spring hinges. Cover thresholds, door frames, and bottoms of wooden doors with metal sheathing.

Remove double floors or raised platforms. Use floor gratings of type suggested for after peak.

(*a*) Replace wooden bins with metal ones, or line them with metal. Install tight-fitting covers on bins.

Eliminate spaces under bins or closets by remodeling so that bottoms will rest flat on floor. Use double thickness of boards if necessary to protect stores from dampness. Make tops of closets sloping.

(*b*) If above remodeling can not be done, screen underneath open spaces of closets, bins, etc., and openings between tops of same and ceilings, with light wire or perforated sheet metal.

VI. GALLEYS

Recondition doors as suggested above for storerooms.

Make ventilating skylights tight fitting and screen same.

Install, where practicable, screen doors for entrance openings to galley, and equip doors with door checks.

Fit metal collars around stovepipe openings in walls of ceilings.

(*a*) Replace wooden cupboards, lockers, and bins with metal ones.

Make lockers, closets, etc., not over 5 feet high, with sloping tops, tight-fitting doors equipped with snap fasteners.

Bottoms of bins, lockers, etc., to rest flat on floor, eliminating underneath spaces. Install waterproof material if necessary to protect.

(*b*) If wooden lockers, closets, bins, etc., are not replaced with metal ones, make the following repairs:

Make doors fit tightly and equip with snap latches.

Eliminate underneath spaces by either remodeling so that bottom will rest on floor and sheath with metal or screen around open spaces.

Put metal flashing 10 inches wide at bottoms of closets. Line wooden bins with sheet metal.

Screen open spaces over tops of closets, etc., which come within a few inches of the ceiling.

Replace flat tops of closets, etc., with sloping ones; or—

(1) Screen open spaces over tops which come within a few inches of reaching the ceiling.

(2) Increase height of closets, etc., so that they will extend to ceilings.

VII. MESS ROOMS

(*a*) Treat all cupboards, closets, etc., as suggested in No. VI.

VIII. LIVING QUARTERS

(*a*) Eliminate double walls, substituting solid walls or walls without spaces between.

(*b*) When this can not be done, block off at partition points, or at least every 50 feet, by installing a screen which will extend from ceiling to deck across the open spaces between the walls. Similarly block off spaces in double floors or ceilings. Wherever angle of floor of such double wall is hidden, it should be flashed with metal.

Repair any defects in panels of any walls.

In all partitions or walls through which pipes, cables, or beams pass, install sheet metal collars or steel flanges.

Where partitions extend up to beams only, leaving openings between tops of partitions and ceilings above, such open spaces should be screened.

Screen ends of all casings used for telegraph, signal, and other apparatus running from bridge to other parts of ship. (NOTE.—electric and signal wires will pass through screens without interference.)

Plug or screen openings in radiator casings around pipes or valves.

Screen open bottoms of radiator casings.

Make all dumb-waiter doors and shafts tight fitting. Plug all holes in walls of shaft. Screen all openings at top and bottom.

Install screen box recesses on doors around openings that have been made for dogs of water-tight doors.

Replace boxed seats with open settees, or make such seats absolutely tight, plugging all holes. Provide tight-fitting lids or covers for top openings.

Screen inside, if boards are defective.

Install flanges or collars in all openings in deck houses through which pipes, drains, or conduits pass.

Screen gooseneck, mushroom, or other ventilators opening on decks the openings of which are within 1 foot of deck.

Screen all openings of forced-draft ventilators throughout the ship.

IX. DECK BOXES OR LOCKERS AND BINS

(a) BOXES

Make tight fitting, with tops that fit snugly. Provide strong, well-made bottoms. Elevate from deck approximately 12 inches, or screen around space underneath.

(b) BINS

Screen entire inside of crates or bins. Provide well-fitting hinged tops. Elevate or screen space underneath as suggested for boxes.

X. BOXES FOR STORAGE OF GARBAGE AND TRASH WHILE VESSEL IS IN PORT

Screened containers of a folding or collapsible type, which could be stored away while at sea, should be provided for use in caring for garbage and other refuse which accumulates while vessel is in port. At present this material is piled on open decks where it remains during the time vessel is in port. In this unprotected state it affords excellent harborage and food for rats.

Containers should be of the crate type, strongly built, screened on entire inside, including top or lid, and the floor should rest flat on deck, leaving no underneath spaces. A well-fitting cover should be provided for each container.

A number of such containers sufficient for the requirements of each ship should be furnished.

Trash may be disposed of by burning in the ship's furnaces each day, if feasible.

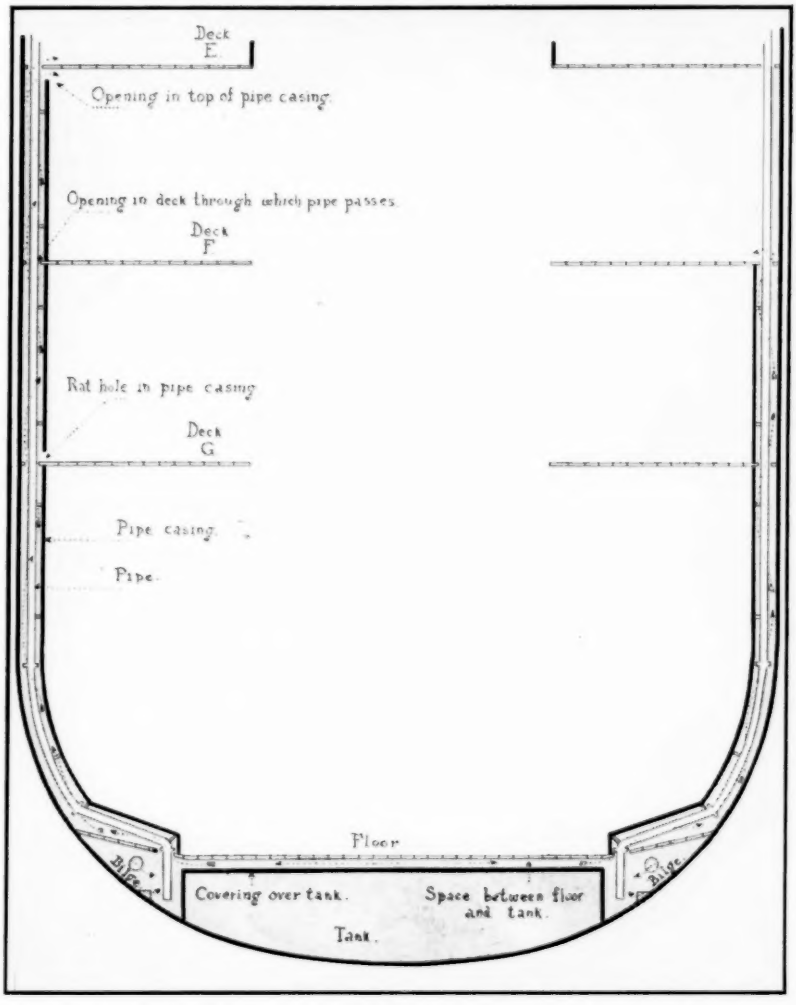
XI. ADMINISTRATIVE DETAILS TO BE OBSERVED ON VESSELS

1. Have all loose food supplies placed under rat-proof covers each night before mess crews go off duty. Scraps of food and garbage should not be thrown on deck or left lying around but collected and placed in containers provided for that purpose.

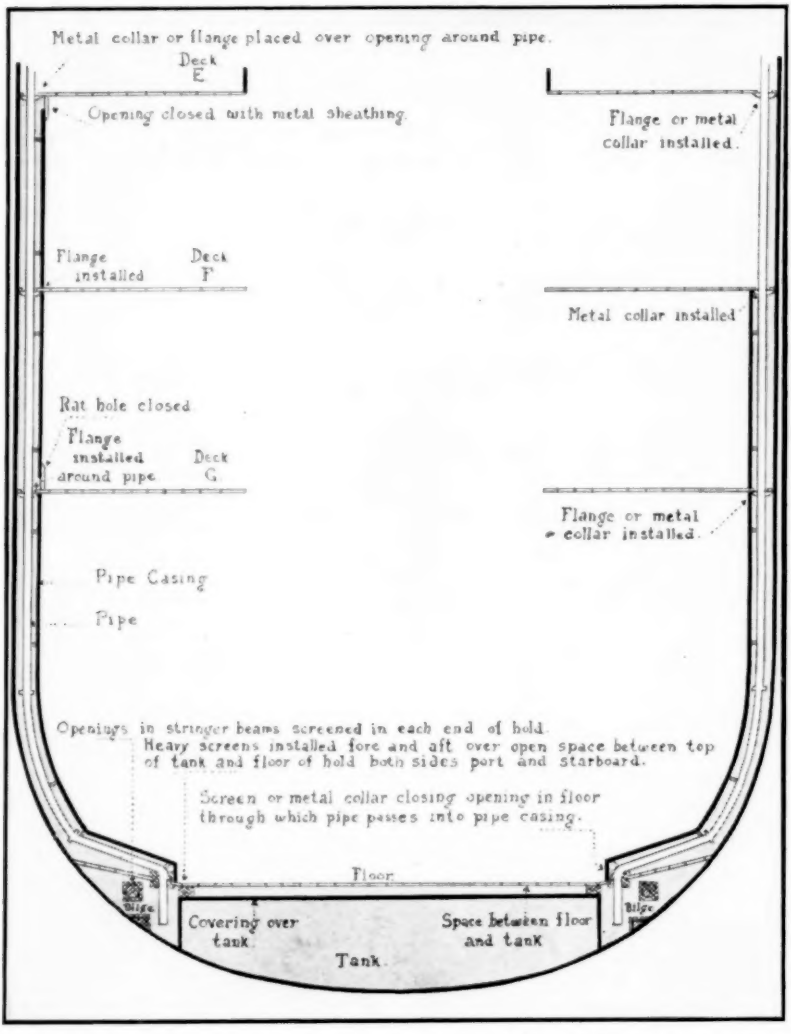
2. Discontinue practice of messing crew in sleeping quarters of forecastle and of storing bread and other dry food staples in lockers of crew in these places.

Comments on Specifications

I—2: Wooden pipe casings are still in use on many ships. They afford such excellent hiding and nesting places for the rat population of the holds that steps should be taken to replace them with the steel type suggested. Pending such replacement the wooden casings should be rat-proofed as outlined. Rat holes and runs over the top and under the bottom openings to the casings are found frequently.

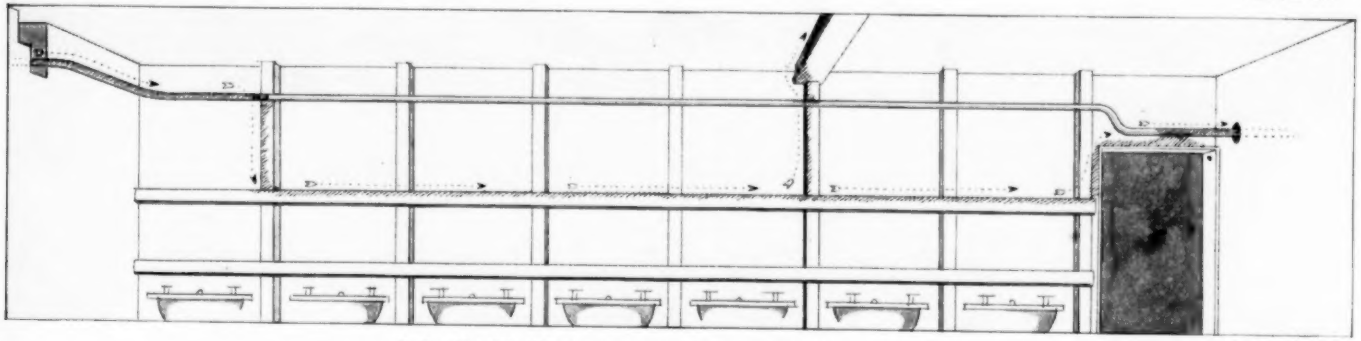


Schematic crosssection of vessel showing how rats may harbor in the bilges and, by utilizing pipe casings, reach almost any part of the ship. This sketch and the sketches following are based on actual conditions on vessels before and after rat proofing. The shading shows open spaces or marks or soiling made by rats. The arrows indicate the line of passage used by rats

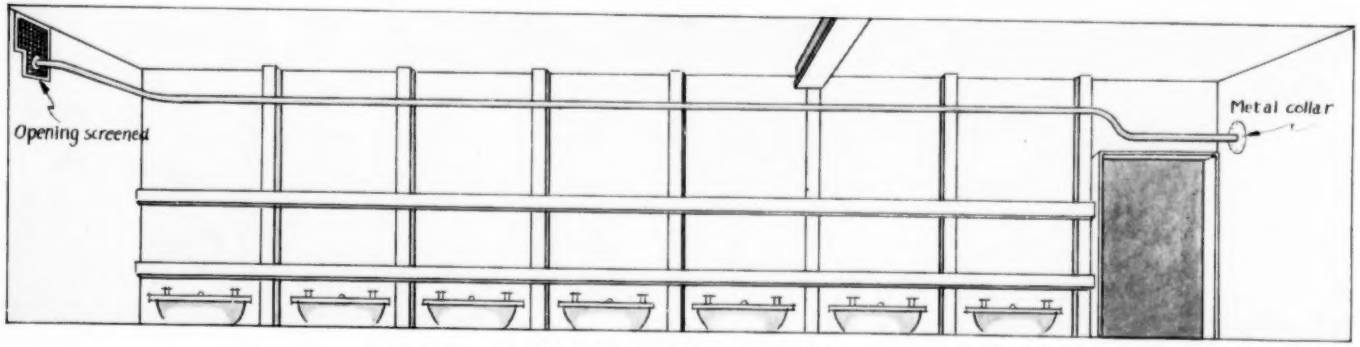

Metal collar or flange placed over opening around pipe.
Deck E
Opening closed with metal sheathing.
Flange or metal collar installed.
Flange installed
Deck F
Metal collar installed
Rat hole closed
Flange installed around pipe
Deck G
Flange or metal collar installed.
Pipe Casing
Pipe
Openings in stringer beams screened in each end of hold.
Heavy screens installed fore and aft over open space between top of tank and floor of hold both sides port and starboard.
Screen or metal collar closing opening in floor through which pipe passes into pipe casing.
Floor
Bilge
Bilge
Covering over tank
Space between floor and tank
Tank

Schematic cross section showing rat proofing. It should be noted that it is necessary to screen openings in stringer beams only at each end of holds

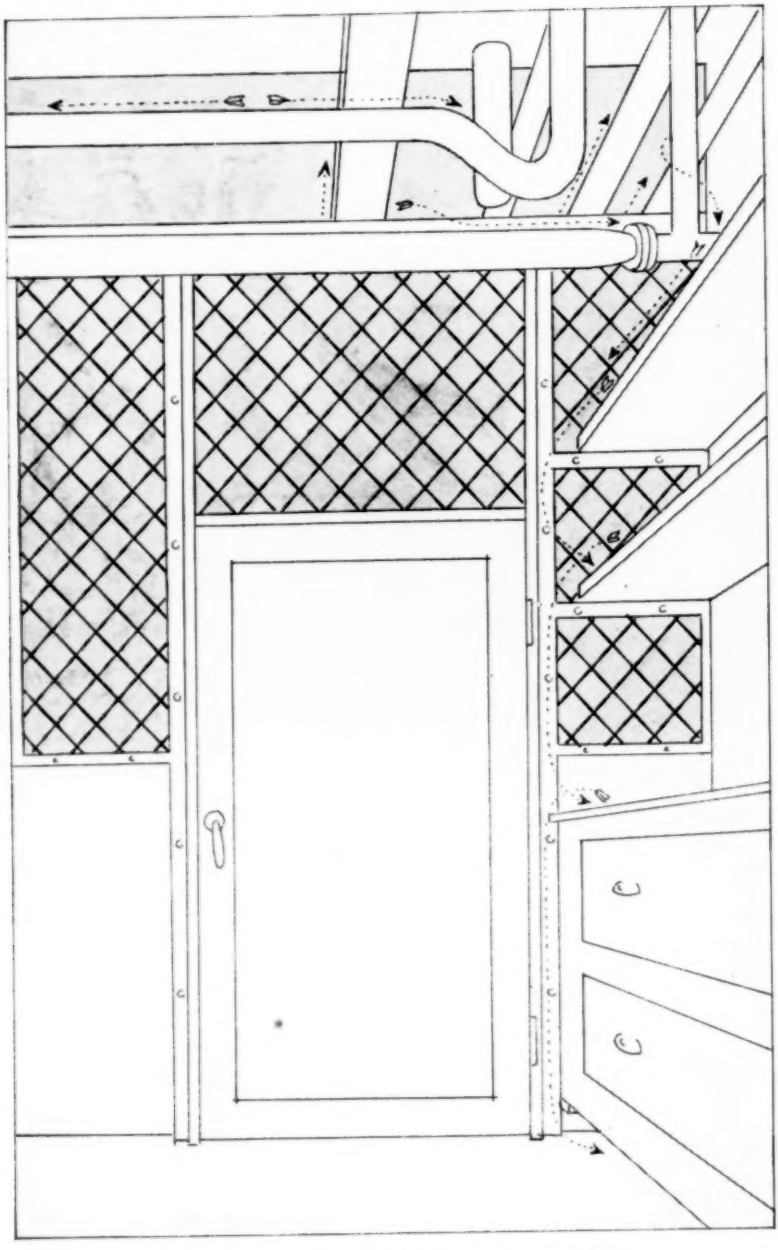
PLATE III



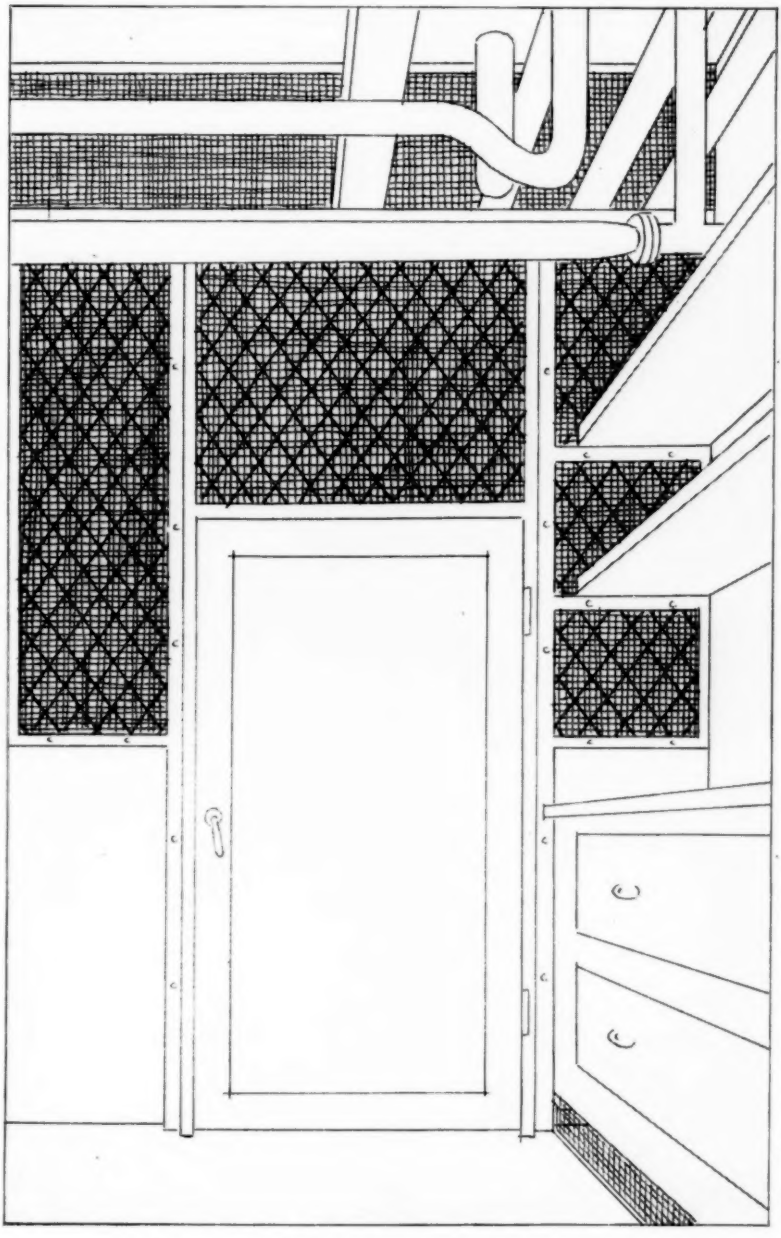
S. S. "No. 3"—Wash room, port side forward, before rat proofing



Same as above after rat proofing

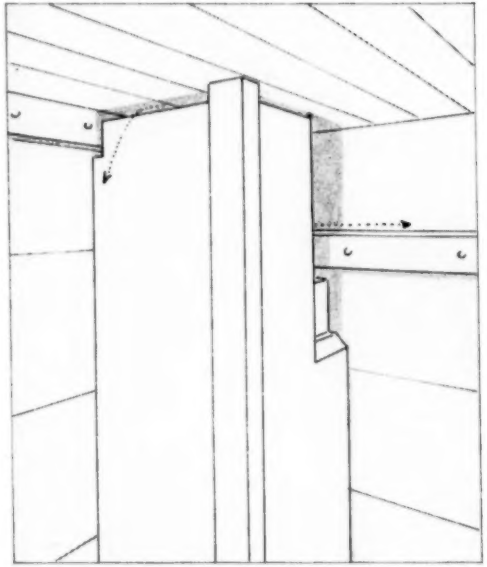


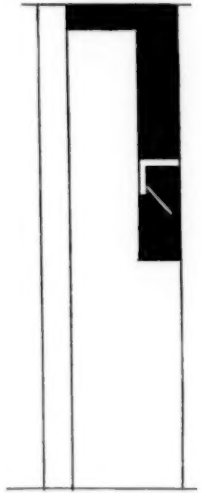
S. S. "No. 1"—Knife room, "F" deck, before rat proofing



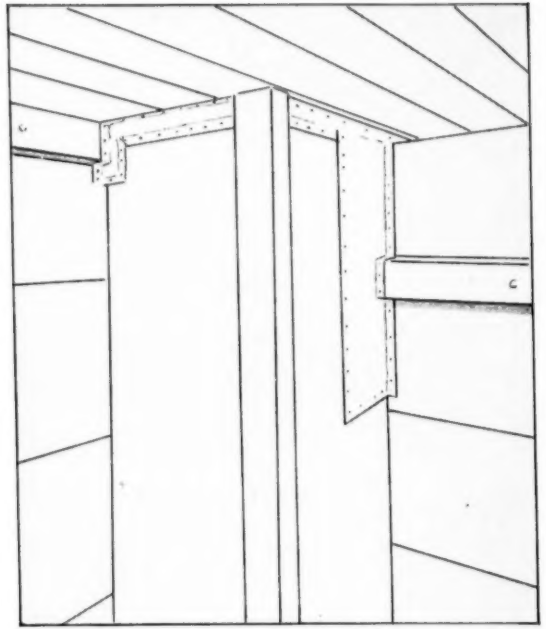
S. S. "No. 1"—Knife room, "F" deck, after rat proofing

PLATE VI



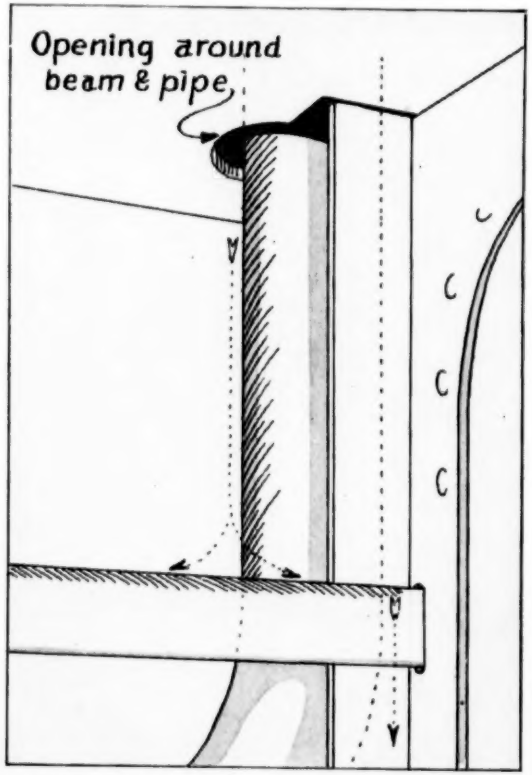


S. S. "No. 2"—Wooden pipe casing, "F" deck, hold No. 5, before rat proofing

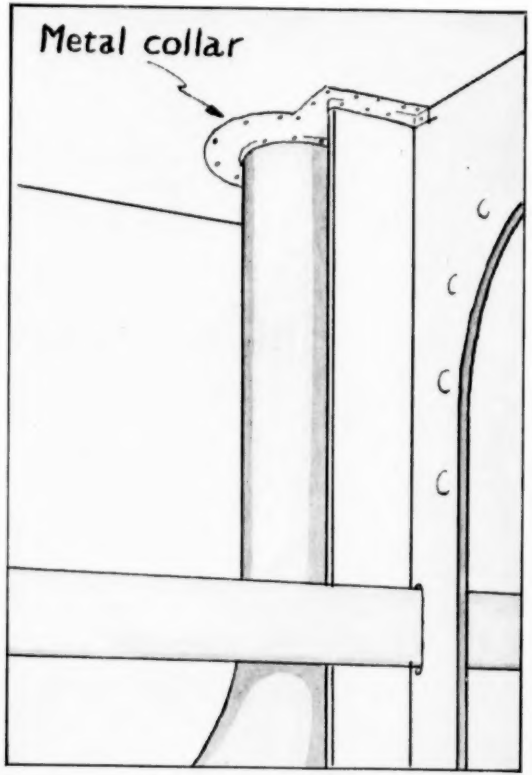


The same after rat proofing

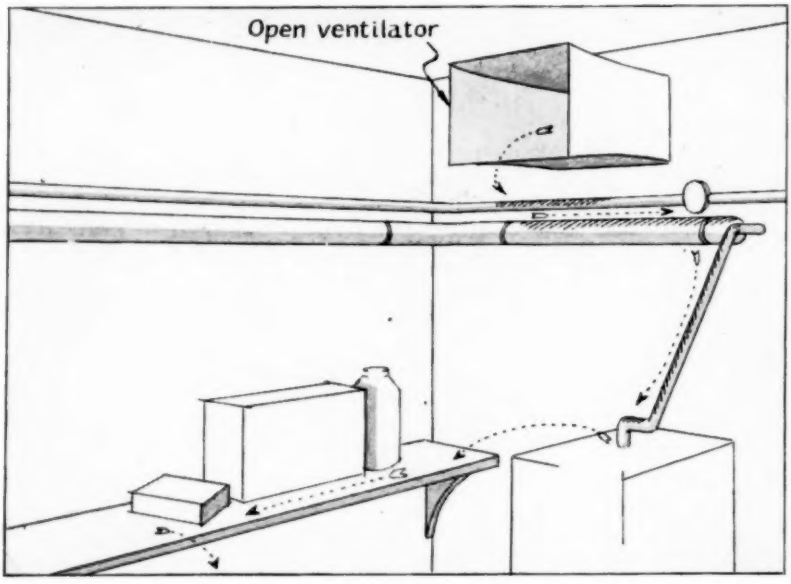
PLATE VII



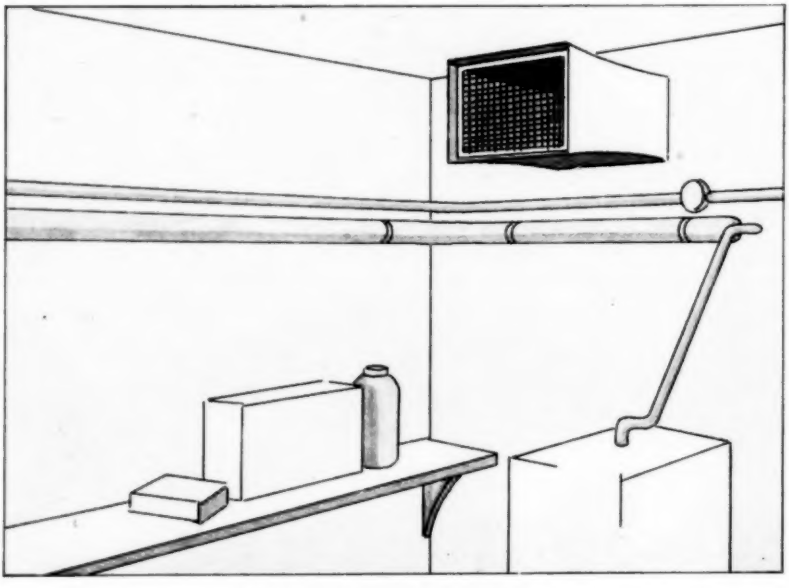
S. S. "No. 3"—Provision storeroom, "G" deck, before rat proofing



The same after rat proofing



S. S. "No. 3"—Silver pantry, "D" deck, before rat proofing



Same as above after rat proofing

I—3: Bilges harbor rats; therefore the lumber and flooring boards covering same should be kept in good repair and tight fitting, and openings under "screen bulkheads" through which they may pass from one compartment to another should be screened.

II: Rats are frequently found in the shaft alleys. They can get there only through the doors to the engine room or the safety escapes which open either in the working alleys or on deck.

IV—1: Fore peaks are deep, not accessible except through the one small booby hatch, and frequently harbor rats. Peaks are difficult to fumigate efficiently unless the ship is put to the delay and labor necessary to remove the gear and junk stored in such places. When fumigated, it is even more difficult to dispel the gas, thus causing additional delay to shipping. There can be no arguments against using fore-peak space for tanks, and not for trash, except custom, which should give way to common sense.

IV—2: If stores are arranged in a more open and orderly manner in the after peak, they can be reached more easily when required, saving both time and labor to the ship.

V: The sloping tops on lockers, closets, etc., are primarily intended to prevent collection of trash which may serve as rat harbors. In addition, such construction improves general neatness and decreases fire risk. Should more locker space be required, the alternative of running the closets up to and flush with the ceiling is allowed.

STRABISMUS AND DEFECTIVE COLOR SENSE AMONG SCHOOL CHILDREN

Sex and Age Incidence and Relation to Visual Acuity[1]

By SELWYN D. COLLINS, Associate Statistician, United States Public Health Service

In the course of studies in child hygiene made by the United States Public Health Service, a large number of school children were tested for acuity of vision and color perception, and examined for various other conditions. The examinations were all made by medical officers of the Public Health Service.

Reports on the results of Snellen tests of visual acuity have already been made.[2] The present study deals with the sex and age incidence of certain eye conditions and their relationship to visual acuity.

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[1] From Field Investigations in Child Hygiene, Senior Surgeon Taliaferro Clark in charge, in cooperation with the Statistical Office, Statistician Edgar Sydenstricker in charge, United States Public Health Service. The data contained in this study were all collected by medical officers of the United States Public Health Service under the supervision of Senior Surgeon Clark.

[2] The Eyesight of the School Child as Determined by the Snellen Test. By Selwyn D. Collins. Pub. Health Rep., Vol. 39, No. 48, Nov. 28, 1924 (Reprint 975).

Variation in Eyesight at Different Ages, as Determined by the Snellen Test. By Selwyn D. Collins and Rollo H. Britten. Pub. Health Rep., Vol. 39, No. 51, December 19, 1924 (Reprint 979).

Strabismus

The above mentioned studies of the eyesight of school children evidence a remarkable lack of attention by parents to the eyes of growing children and their failure to appreciate the potentially serious import of certain types of visual defect. Notedly is this true of strabismus, or squint, so often neglected in the optimistic belief that the child will outgrow the condition.

At birth a child does not recognize objects because he sees so many things at the same time. At this period of development the eyes often are not parallel. Later he learns to suppress the images that are not clearly focused on the retina and acquires binocular single vision with the development of the fusion faculty.

Whether the cause of squint be the lack of development of the fusion center, as contended by some, or muscular or anatomic anomaly, as contended by others, it is of the greatest importance that the condition be recognized promptly. If after the first year the eyes of the infant do not remain parallel, the condition is abnormal and prompt treatment should be instituted if parallelism is to be restored and vision saved in the squinting eye. This is borne out by the record of 260 cases of squint observed in private practice reported by Green.[3] Only 18 cases, or 7 per cent of the total, were cured by nonoperative means. None of these 18 cured patients was over 8 years of age, and 13 of them were 6 years of age or less, although more than half of the 260 squint cases were over 8 years of age. It is quite evident, as judged by these observations, that to be successful, nonoperative treatment should begin at an early age, because, if such treatment is deferred, the danger of loss of vision in the squinting eye is greatly increased.

In the course of some 12,000 examinations of school children in Nassau County, N. Y., New Castle County, Del., Porter County, Ind., Frederick County, Md., and Spartanburg and near-by mill villages in South Carolina, made by officers of the United States Public Health Service, strabismus or squint was noted and distinguished as internal and external. No special test was made for strabismus, the examiner merely noting the condition from the appearance of the eyes.

Among children of all ages, 0.91 of 1 per cent were observed as having strabismus. This percentage is approximately the same as that for school children in England, where the strabismus rate was 1.1 per cent for over a million children examined in the course of school medical inspection.[4]

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[3] Squint: When shall we Operate? By A. S. Green, and L. D. Green, J. A. M. A., Vol. 77, No. 13, September 24, 1921, p. 1003.

[4] Annual reports of the Chief Medical Officer of the (British) Board of Education, London. Page 41 of Report for 1922.

Of the cases included in the present study, about four-fifths were internal and one-fifth external in type. Data on English children show a somewhat smaller proportion of strabismus cases to be external in type.[5] Since convergent or internal strabismus usually develops early in life, whereas divergent or external strabismus as a rule develops later in life,[6] the proportion of cases of each type might be different among adults from that among school children.

Age and sex incidence.—The strabismus rate for girls is slightly higher than for boys when all ages are considered together, but the difference is not significant as tested by the probable error.

TABLE 1.—*Age and sex incidence of strabismus of each type*

Percentage of children of each age group who have strabismus—12,134 white children 6 to 16 years of age in Nassau County, N. Y., New Castle County, Del., Porter County, Ind., Frederick County, Md., and Spartanburg and near-by mill villages in South Carolina [1]

Age nearest birthday	Percentage with strabismus			Number of cases of strabismus			Number of children examined
	Total	Internal	External	Total	Internal	External	
BOTH SEXES							
All ages	0.91	0.73	0.17	110	89	21	12,134
6-7	1.25	1.15	.10	24	22	2	1,913
8-9	1.09	.88	.20	32	26	6	2,948
10-11	1.09	.89	.21	32	26	6	2,922
12-13	.48	.32	.16	12	8	4	2,519
14-16	.55	.38	.16	10	7	3	1,832
BOYS							
All ages	0.82	0.69	0.13	51	43	8	6,245
6-11	1.01	.87	.15	41	35	6	4,041
12-16	.45	.36	.09	10	8	2	2,204
GIRLS							
All ages	1.00	0.78	0.22	59	46	13	5,889
6-11	1.26	1.04	.21	47	39	8	3,742
12-16	.56	.33	.23	12	7	5	2,147

[1] All are children of native white parents, except in Indiana, where a few of foreign-born white parents are included.

The percentage of children who have external strabismus is practically constant throughout the school ages, showing possibly a slight tendency to increase. On the other hand, internal strabismus is much more prevalent among children under 12 years than it is among older children. This is in agreement with the observation of Fuchs that internal or convergent strabismus is frequently "outgrown," so far as the appearance is concerned. This happens usually about the age of puberty. However, real binocular vision is seldom restored.[7]

[5] Reports of Chief Medical Officer, op. cit. Page 57 of Report for 1909; pp. 40, 44 of Report for 1910.

[6] Fuchs: Textbook of Ophthalmology (Duane translation), J. B. Lippincott Co. (1924), p. 332

[7] Fuchs: op. cit., page 325. Also see, "The Incidence of Squint at Various Ages." By T. S. Barrie. Transactions of the Ophthalmological Society of the United Kingdom, Vol. XLII, 1922, pp. 273-277.

The incidence of strabismus observed in the examinations made for this study would of course fall as the "outgrowing" process took place.

It is also of interest to compare the incidence of strabismus among children of school age with that among children of preschool age and adults. At Gary, Ind., the strabismus rate was 1.3 per cent among 994 children under 2 years of age, and 2.4 per cent among 3,125 children 2 to 7 years of age.[8] These percentages are somewhat higher than those for the younger age groups of school children. Data compiled by Worth indicate that for convergent or internal squint (by far the most common type among children), 35 per cent of the cases have their onset before 2 years of age, 58 per cent from 2 to 6 years and only about 7 per cent after 6 years of age.[9] The preschool age might therefore be expected to have a higher rate than that for infants or for school children.

In a study of eye conditions among 2,449 post-office employees in New York City by the United States Public Health Service, the rate for strabismus or squint was 0.29 of 1 per cent.[10] This rate is somewhat lower than the rate for school children of the older age groups, as might be expected in view of the "outgrowing" of squint.

In neither of the references cited are the cases of squint classified as internal or external. Since internal strabismus is so much more common than external, the relative incidence of squint as a whole in different groups reflects the tendencies of internal strabismus rather than that of the more rare external type.

Relation to visual acuity.—The association of strabismus with diminished visual acuity is quite definite. Table 2 shows, for Porter County, Ind., the strabismus rates among children of different visual acuities.

TABLE 2.—*Strabismus and visual acuity, by sex*

Percentage of children of each visual acuity, as determined by the Snellen test, who have strabismus—White school children in Porter County, Ind.

Visual acuity (Snellen test)	Percentage with strabismus			Number of cases of strabismus			Number of children examined		
	Both sexes	Boys	Girls	Both sexes	Boys	Girls	Both sexes	Boys	Girls
20/20 or better in both eyes	0.13	0.12	0.14	2	1	1	1,562	835	727
20/30 in one eye and 20/30 or better in other	.47	.34	.57	3	1	2	645	292	353
20/40 or 20/50 in one eye and 20/50 or better in other	3.20	3.77	2.78	4	2	2	125	53	72
20/70 or worse in one or both eyes	8.11	9.67	6.98	6	3	3	74	31	43

[8] Physical Status of Preschool Children, Gary, Ind. By Anna E. Rude, U. S. Children's Bureau Publication No. 111 (1922), pp 28, 76.

[9] Squint: Its Causes, Pathology, and Treatment. By Claud Worth. P. Blackiston's Son & Co., Phila. (1903), p 41.

[10] Studies in Illumination. I. The Hygienic Conditions of Illumination in Certain Post Offices, Especially Relating to Visual Defects and Efficiency. By L. R. Thompson, L. Schwartz, J. E. Ives, and N. P. Bryan. Public Health Bulletin No. 140 (1924), pp. 50-51.

The rates increase regularly from 0.13 of 1 per cent for children with normal visual acuity to 8.11 per cent for those with vision of 20/70 or worse in one or both eyes. The difference between these rates, 7.98 ± 2.14, is significant, being more than three and one-half times its probable error. Of more importance, perhaps, is the fact that the increase in the strabismus rate as visual acuity decreases is regular for both boys and girls.

In general strabismus is not so closely associated with poor visual acuity as it is with difference in the visual acuity of the two eyes due to the strabismus. The group of children with vision of 20/70 or worse in one or both eyes was further classified into those with poor vision in both eyes and those with good vision in one eye and poor vision in the other. Of the children with vision of 20/70 or worse in both eyes 4.65 per cent had strabismus, but of those with 20/70 or worse in one eye and better than 20/70 in the other 12.91 per cent had strabismus.

The number of children considered in this analysis was small and the data from the other localities included in Table 1 were not in such form that they could be used. In order to study this problem further, data on white school children from Cecil County, Md., and from Orange and Pinellas Counties, Fla., were combined with the data from Porter County, Ind. Table 3 shows the strabismus rates among children with approximately the same visual acuity in both eyes and among those with the visual acuity differing in the two eyes. In both cases the children are separated into several classes according to acuity of vision.

TABLE 3.—*Strabismus and difference in visual acuity in the two eyes*

Percentage of children of each visual acuity, as determined by the Snellen test, who have strabismus—White school children in Porter County, Ind., Cecil County, Md., and Orange and Pinellas Counties, Fla.

Visual acuity (Snellen test)	Percentage with strabismus	Number of cases of strabismus	Number of children examined
VISUAL ACUITY APPROXIMATELY THE SAME IN BOTH EYES			
20/20 or better	0.22	19	8,692
20/30	.37	7	1,876
20/40 or 20/50	2.50	5	200
20/70 or worse	2.52	3	119
VISUAL ACUITY DIFFERENT IN THE TWO EYES			
20/20 or better in one eye and 20/30 in the other	0.17	2	1,207
20/40 or 20/50 in one eye and 20/30 or better in other	1.75	5	285
20/70 or worse in one eye and 20/40 or 20/50 in other	5.88	3	51
20/70 or worse in one eye and 20/30 or better in other	10.45	14	134

The percentage of children who have strabismus increases as visual acuity decreases, even among children with approximately the same acuity in both eyes. The rates range from 0.22 of 1 per cent among children with 20/20 or better in both eyes to 2.52 per cent among those with 20/70 or worse in both eyes. But among children with 20/70 or worse in one eye and 20/30 or better in the other 10.45 per cent had strabismus. The high incidence in the latter group is true for both the younger and the older school children, the rate among those under 12 years being 11.48 per cent and among those 12 years and over being 9.59 per cent. The slightly lower rate for the older children is probably due to the "outgrowing" of squint and does not indicate any improvement in the vision. The problem may be clarified by approaching it from another angle. Of the 37 children under 12 years of age (Table 3) who had strabismus, 19 per cent had vision of 20/70 or worse in one eye and 20/30 or better in the other; but of the 21 children 12 years old and over who had strabismus, 33 per cent had vision of 20/70 or worse in one eye and 20/30 or better in the other. Presumably the vision of the squinting eye diminishes as age increases, although the percentages based on the few children who had strabismus are not sufficiently reliable to more than suggest this. However, authorities agree that the visual acuity of the squinting eye becomes less after the squint develops. Fuchs may be quoted on this matter:

> The visual acuity of the squinting eye is usually diminished as compared with the other or sound eye (except in alternating squint). In many cases probably a certain degree of enfeeblement of sight exists even before the inception of the strabismus and in fact constitutes one of the reasons for the development of the latter. The enfeeblement of sight, however, becomes greater and greater the longer the strabismus lasts, since an amblyopia ex anopsia develops on account of the exclusion of the eye from the act of vision. This amblyopia finally reaches such a pitch that reading becomes impossible, and the sight may even be reduced to the ability to count fingers at a short distance.[11]

Unfortunately, strabismus in the group of children shown in Table 3 was not distinguished as internal or external. But since the great majority of the cases among children are internal, the results no doubt reflect those for internal rather than external strabismus, if there is any difference in the relation of the two types to visual acuity.

A number of predisposing factors contribute to the development of convergent squint, including certain types of visual defect, the effects of certain of the children's diseases and violent mental disturbances. However, it is claimed by some authorities that the essential cause of squint is a defect of the fusion faculty in which the hereditary influence is a marked feature.[12] Harman defines the

[11] Fuchs: Op. cit., p. 332

[12] Worth: op. cit., pp. 54-62.

fusion faculty as "the faculty or power of the brain to fuse into one satisfactory picture the two divers images seen by the eyes." [13] According to Worth this faculty may be strengthened by certain measures and the deviation overcome.

Worth presents data (chiefly for children under school age) indicating that in a very large proportion of the cases of convergent strabismus which he saw relatively soon after the appearance of the squint, the patient's visual acuity was 20/20 in the deviating eye but among those cases seen after the patient had squinted for a relatively long time, a very large proportion had a visual acuity of 20/120 or worse in the deviating eye.[14] From these data he concludes, with regard to convergent squint, "that congenital amblyopia only occurs in a very small proportion of the cases, and is never responsible for the extreme blindness so often found in neglected cases of monolateral squint." [15]

The poor vision and the difference in vision associated with squint as shown in Tables 2 and 3 seem, therefore, to be primarily the result of squint rather than its cause. Early attention of an ophthalmologist may save the vision of the affected eye.

Defective Color Sense

As a part of the examination of 12,000 school children in Nassau County, N. Y., New Castle County, Del., Porter County, Ind., Frederick County, Md., and in Spartanburg and near-by mill villages

[13] Defects of Vision. By N. Bishop Harman. Chapter VIII, in Defective Children, edited by T. N. Kelynack. T. Fisher Unwin, London (1915) p. 180.

[14] Worth: op. cit., p. 76-77. The following table is a summary of the data:

Visual acuity of the deviating eye in cases of constant monolateral convergent squint seen by Worth, classified according to age at onset of the deviation and length of time the patient had squinted before examination

Vision of the deviating eye	Age at onset of deviation							
	All ages		Under 1 year		1-3 years		Over 3 years	
	When case was first seen, patient had squinted during—							
	Less than one-eighth of his life	More than one-half of his life	Less than one-eighth of his life	More than one-half of his life	Less than one-eighth of his life	More than one-half of his life	Less than one-eighth of his life	More than one-half of his life
20/20	165	14	23	-------	62	3	80	11
20/30 and 20/40	17	28	2	2	6	7	9	19
20/60 and 20/80	9	90	1	4	3	32	5	54
20/120 and 20/200	2	102	-------	8	1	53	1	41
Less than 20/200	-------	179	-------	55	-------	103	-------	21
Fixation lost irrecoverably	-------	191	-------	56	-------	110	-------	25

The middle group, those who had squinted more than one-eighth but less than one-half of their lives, is omitted here. They fall midway between the other groups and therefore are in agreement with the data given in the table.

[15] Worth: op. cit. p. 79.

in South Carolina, the color vision of each child was tested. Holmgren's wool test was used. Naming of the colors was of course not required, but only the ability to sort similar colors. A more detailed description of the test may be found elsewhere.[16] Inasmuch as the distinguishing of delicate shades was not required, only the more pronounced cases of defective color sense would be found.

Sex incidence.—Table 4 shows by sex and two age groups the percentage of children with defective color sense.

TABLE 4.—*Sex incidence of defective color sense*

Percentage of children of each sex and age group who have defective color sense—12,134 white children, 6 to 16 years of age, in Nassau County, N. Y., New Castle County, Del., Porter County, Ind., Frederick County, Md., and Spartanburg and near-by mill villages in South Carolina [1]

Sex	Percentage with defective color sense			Number of cases of defective color sense			Number of children tested		
	All ages	6-11	12-16	All ages	6-11	12-16	All ages	6-11	12-16
Both sexes	1.16	1.14	1.20	141	89	52	12,134	7,783	4,351
Boys	2.00	1.98	2.04	125	80	45	6,245	4,041	2,204
Girls	.27	.24	.33	16	9	7	5,889	3,742	2,147

[1] All are children of native white parents, except in Indiana, where a few of foreign-born white parents are included.

Defective color sense is very much more prevalent among boys than girls, 2 per cent of the boys being affected as against about one-fourth of 1 per cent of the girls. The explanation of the relatively high color-blind rate among males is, apparently, that the defect is usually, though not invariably, hereditary and is a sex-linked characteristic.[17] Rosenau may be quoted in this regard:

> Color blindness, or daltonism, is a condition probably not localized in the eyes, but due to some defect in the central nervous structure. It is transmitted hereditarily. Color blindness is much commoner in men than in women. A color-blind man, however, does not transmit color blindness to his sons; the daughters, also, are themselves normal, provided the mother was; yet the daughters transmit color blindness to half their sons. A color-blind daughter could be produced apparently only by the marriage of a color-blind man with a woman who transmits color blindness, since the daughter, to be color blind, must have received this unit character from both parents, whereas the color-blind son receives the character only from his mother; that is, the condition is sex linked.[18]

The rates in the two age groups shown in Table 4 are practically the same; the slight difference is much less than its probable error and, therefore, can not be considered at all significant. An attempt was made to determine the incidence in narrower age groups. Some variation was found, but when the different localities were considered separately, there did not seem to be any evidence that there was any consistent age variation in the several localities. Also there were no significant differences between the rates for different ages as tested by

[16] Color Blindness—Its Relation to Other Ocular Conditions and the Bearing on Public Health of Tests for Color Sense Acuity. By George L. Collins. Public Health Bulletin No. 92 (1918), pp. 11-12.

[17] Public Health Bulletin No. 92, p. 5; Rosenau, M. J.: Preventive Medicine and Hygiene, fourth edition, D. Appleton & Co. (1922), pp. 922-923; Fuchs: op. cit., p. 243.

[18] Rosenau: op. cit., 650.

their probable errors. In a characteristic of this kind, largely hereditary and not affected by environmental conditions, it does not seem reasonable that there should be any significant variation in the incidence at different ages.

Relation to visual acuity.—Data were available for Porter County, Ind., to compare the incidence of defective color sense among children of good and of poor visual acuity. As there were only 3 girls with defective color sense among the children tested in that locality, the analysis was necessarily limited to boys.

TABLE 5.—*Defective color sense and visual acuity*

Percentage of boys of each visual acuity as determined by the Snellen test who have defective color sense—White schoolboys in Porter County, Ind.

Visual acuity (Snellen test)	Percentage with defective color sense	Number of cases of defective color sense	Number of boys tested
20/20 or better in both eyes	2.16	18	835
20/30 or worse in one or both eyes	1.86	7	376

The percentage with defective color sense is slightly higher among boys with normal vision. The difference, however, is not significant as tested by its probable error. Nor does any reason appear for a higher color blind rate among children with good vision. The most that the limited data at hand can be said to indicate is that as large a proportion of children with normal vision as determined by the Snellen test, have defective color sense as of children with defective vision. Defective color sense of the type found among school children does not seem to be associated with visual acuity.

Summary

The eyes of a large number of school children in certain localities in the eastern part of the United States were tested and examined for visual acuity, color perception, and other eye conditions.

The percentage of children who have internal strabismus decreases with age, but the rate for external strabismus is practically constant for the various age groups.

A larger proportion of children of poor visual acuity have strabismus than of children with good visual acuity. This is true for children of approximately the same visual acuity in both eyes. However, a much larger proportion of children with good visual acuity in one eye and poor visual acuity in the other have strabismus than of children with poor visual acuity in both eyes.

Defective color sense is very much more prevalent among boys than among girls.

Defective color sense of the type found among school children does not seem to be associated with visual acuity, so far as the limited data on this point indicate.

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TYPHOID FEVER IN THE UNITED STATES

COMPARISON OF THE FIRST HALF OF THE YEARS 1924 AND 1925

An increase in the number of cases of typhoid fever reported in the United States has been noted during the first half of 1925 as compared with the same period of last year.

The accompanying table gives a summary of the weekly reports of typhoid fever cases which have been published in the Public Health Reports this year compared with reports from the same States and cities last year.

The number of cases of typhoid fever and the deaths from this disease have been decreasing for at least two decades in the United States, and the disease is now much less prevalent than it was a few years ago.

Some of the increase shown in the table is probably due to improvement in reporting, resulting in a larger percentage of the cases being recorded.

While many sections of the country have shown some increase over last year, the greatest difference in recent weeks has been reported in the South Atlantic and East South Central States.

Cases of typhoid fever reported in 1925 compared with the number reported in 1924

Week ended, 1925	States				Cities			
	Number of States	Cases reported		Difference	Number of cities	Cases reported		Difference
		1925	1924			1925	1924	
Jan. 10	34	391	219	+172	104	198	81	+117
17	32	279	244	+35	104	117	77	+40
24	33	270	202	+68	104	94	68	+26
31	34	256	232	+24	103	97	76	+21
Feb. 7	34	267	266	+1	103	73	76	−3
14	33	203	219	−16	103	72	73	−1
21	33	275	221	+54	104	60	52	+8
28	33	226	199	+27	101	75	50	+25
Mar. 7	34	201	227	−26	105	62	46	+16
14	34	206	155	+51	100	46	55	−9
21	33	179	236	−57	105	65	60	+5
28	33	210	203	+7	101	59	75	−16
Apr. 4	33	204	245	−41	103	44	49	−5
11	32	177	213	−36	104	53	52	+1
18	33	202	173	+29	102	55	54	+1
25	34	244	184	+60	100	90	64	+26
May 2	34	259	229	+30	102	98	48	+50
9	34	242	245	−3	104	75	67	+8
16	34	256	244	+12	103	74	71	+3
23	34	352	266	+86	103	102	78	+24
30	33	348	237	+111	98	86	76	+10
June 6	33	519	296	+223	101	136	90	+46
13	34	500	342	+158	101	155	107	+48
20	33	530	370	+160	101	121	128	−7
27	32	694	293	+401	102	146	90	+56
Total	----------	7,490	5,960	+1,530	----------	2,253	1,763	+490

DEATHS DURING WEEK ENDED JULY 4, 1925

Summary of information received by telegraph from industrial insurance companies for week ended July 4, 1925, and corresponding week of 1924. (From the Weekly Health Index, July 8, 1925, issued by the Bureau of the Census, Department of Commerce)

	Week ended July 4, 1925	Corresponding week, 1924
Policies in force	59, 540, 898	56, 512, 688
Number of death claims	9, 287	7, 513
Death claims per 1,000 policies in force, annual rate	8. 1	6. 9

Deaths from all causes in certain large cities of the United States during the week ended July 4, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1924. (From the Weekly Health Index, July 8, 1925, issued by the Bureau of the Census, Department of Commerce)

City	Week ended July 4, 1925		Annual death rate per 1,000 corresponding week, 1924	Deaths under 1 year		Infant mortality rate week ended July 4, 1925 [2]
	Total deaths	Death rate [1]		Week ended July 4, 1925	Corresponding week, 1924	
Total (64 cities)	5,394	10.3	[3] 10.4	635	[3] 573	[4] 51
Akron	23			0	3	0
Albany [5]	17	7.4	10.6	3	4	65
Atlanta	70			19	7	
Baltimore [5]	166	10.9	10.6	15	23	45
Birmingham	59	15.0	10.4	20	6	
Boston	164	10.9	11.8	17	18	45
Bridgeport	25			3	2	48
Buffalo	105	9.9	10.3	15	12	61
Cambridge	18	8.3	8.4	1	3	17
Camden	22	8.9	10.7	1	6	16
Chicago [5]	597	10.4	8.7	75	49	66
Cleveland	156	8.7	7.4	25	19	62
Columbus	74	13.8	11.5	8	7	73
Dallas	57	15.4	12.5	4	10	
Dayton	33	9.9	7.4	1	1	16
Denver	65	12.1	13.0	8	2	
Des Moines	31	10.8	7.5	2	1	34
Detroit	191			32	44	55
Duluth	12	5.7	9.6	4	7	86
El Paso	29	14.4		6		
Erie	25			3	3	58
Fall River [5]	29	12.5	10.8	5	3	72
Flint	13	5.2	7.6	2	4	32
Fort Worth	38	13.0	6.3	4	2	
Grand Rapids	37	12.6	8.8	3	1	47
Houston	55	17.4	15.0	7	5	
Indianapolis	73	10.6	10.8	5	4	36
Jersey City	41	6.8	10.4	5	7	35
Kansas City, Kans	19	8.0	12.0	4	5	84
Kansas City, Mo	97	13.8	11.3	11	9	
Los Angeles	197			21	32	58
Louisville	72	14.5	13.1	13	7	114
Lowell	17	7.6	12.6	4	4	70
Lynn	21	10.5	14.1	3	1	80
Memphis	68	20.3	19.4	10	10	
Milwaukee	104	10.8	7.6	14	14	65
Minneapolis	79	9.7	9.0	12	12	64

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1924. Cities left blank are not in the registration area for births.
[3] Data for 62 cities.
[4] Data for 59 cities.
[5] Deaths for week ended Friday, July 3, 1925.

Deaths from all causes in certain large cities of the United States during the week ended July 4, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1924. (From the Weekly Health Index, July 8, 1925, issued by the Bureau of the Census, Department of Commerce)—Continued

City	Week ended July 4, 1925		Annual death rate per 1,000 corresponding week, 1924	Deaths under 1 year		Infant mortality rate week ended July 4, 1925
	Total deaths	Death rate		Week ended July 4, 1925	Corresponding week, 1924	
Nashville [1]	46	17.6	14.8	9	3	----
New Bedford	23	8.9	9.4	3	1	50
New Haven	33	9.6	11.6	4	9	52
New Orleans	165	20.8	12.0	27	11	----
New York	990	8.5	9.5	103	125	41
Bronx Borough	116	6.7	7.7	13	14	45
Brooklyn Borough	321	7.5	9.0	39	49	40
Manhattan Borough	417	9.6	10.8	42	51	44
Queens Borough	108	9.8	8.4	5	7	23
Richmond Borough	28	10.9	13.6	4	4	72
Newark, N. J	82	9.4	8.3	19	7	87
Norfolk	23	----	----	4	7	74
Oakland	40	8.2	10.3	1	5	12
Oklahoma City	35	----	----	8	5	----
Omaha	48	11.8	8.3	6	4	62
Paterson	18	6.6	8.9	1	3	17
Philadelphia	396	10.4	12.3	40	29	51
Pittsburgh	118	9.7	13.5	15	26	50
Portland, Oreg	67	12.4	8.8	4	4	40
Providence	59	12.6	12.8	5	5	40
Rochester	67	10.5	9.8	6	7	48
St. Louis	179	11.4	12.0	15	14	----
St. Paul	51	10.8	8.3	4	2	34
Salt Lake City [1]	31	12.3	11.0	6	5	94
San Antonio	52	13.7	18.0	9	6	----
San Diego	33	17.1	14.1	2	3	47
San Francisco	108	10.1	12.0	8	7	46
Schenectady	17	8.7	8.3	2	0	56
Seattle	72	----	----	7	1	67
Somerville	6	3.1	9.9	0	0	0
Springfield, Mass	29	9.9	8.1	2	1	30
Syracuse	37	10.1	10.3	5	4	63
Tacoma	18	9.0	9.6	1	2	23
Toledo	51	9.3	12.5	7	8	63
Trenton	23	9.1	11.7	3	5	49
Utica	26	12.6	----	1	----	21
Washington, D. C	110	11.5	13.1	10	12	56
Waterbury	10	----	----	2	0	43
Wilmington, Del	13	5.6	7.0	0	1	0
Worcester	42	11.0	11.5	6	6	69
Yonkers	11	5.1	10.9	0	2	0
Youngstown	37	12.1	6.0	4	0	49

[1] Deaths for week ended Friday, July 3, 1925.

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

Reports for Week Ended July 11, 1925

ALABAMA

	Cases
Cerebrospinal meningitis	1
Chicken pox	6
Diphtheria	10
Dysentery (amebic)	1
Influenza	2
Malaria	122
Measles	2
Mumps	20
Pellagra	33
Pneumonia	8
Poliomyelitis	3
Scarlet fever	24
Smallpox	21
Tuberculosis	37
Typhoid fever	69
Whooping cough	38

ARIZONA

Chicken pox	4
Diphtheria	2
Malta fever	1
Measles	6
Poliomyelitis	1
Tuberculosis	23
Typhoid fever	4
Whooping cough	6

ARKANSAS

Chicken pox	6
Diphtheria	1
Hookworm disease	3
Influenza	13
Malaria	114
Measles	2
Mumps	9
Pellagra	29
Scarlet fever	1
Tuberculosis	19
Typhoid fever	46
Whooping cough	20

CALIFORNIA

Cerebrospinal meningitis:	Cases
Los Angeles	1
Napa County	1
Sacramento	1
Diphtheria	58
Influenza	4
Leprosy—Stockton	1
Lethargic encephalitis:	
Los Angeles	4
Pasadena	1
San Diego	1
San Francisco	1
Measles	28
Poliomyelitis:	
Bakersfield	1
Berkeley	2
Glendora	1
Long Beach	1
Los Angeles	7
Los Angeles County	3
Oakland	2
Pomona	1
San Francisco	2
South Pasadena	1
Scarlet fever	50
Smallpox:	
Berkeley	6
Los Angeles	22
Oakland	9
San Diego	8
Scattering	18
Typhoid fever	15

COLORADO

(Exclusive of Denver)

Chicken pox	6
Diphtheria	10
Measles	5
Mumps	15

COLORADO—continued	Cases
Pneumonia	5
Scarlet fever	13
Tuberculosis	65
Typhoid fever	6
Whooping cough	22

CONNECTICUT	
Chicken pox	16
Diphtheria	17
German measles	4
Influenza	5
Malaria	2
Measles	86
Mumps	12
Pneumonia (all forms)	23
Scarlet fever	14
Septic sore throat	1
Tetanus	1
Tuberculosis (all forms)	25
Typhoid fever	3
Whooping cough	102

DELAWARE	
Measles	7
Smallpox	1
Tuberculosis	10
Typhoid fever	2
Whooping cough	1

FLORIDA	
Cerebrospinal meningitis	1
Dengue	1
Diphtheria	11
Influenza	20
Lethargic encephalitis	1
Malaria	29
Measles	1
Mumps	7
Pneumonia	86
Poliomyelitis	4
Scarlet fever	1
Smallpox	3
Tetanus	4
Tuberculosis	96
Typhoid fever	33
Whooping cough	10

GEORGIA	
Chicken pox	8
Conjunctivitis	2
Dengue	1
Diphtheria	10
Dysentery	18
Hookworm disease	6
Influenza	6
Malaria	86
Measles	3
Mumps	26
Pellagra	13
Pneumonia	12
Scarlet fever	2
Septic sore throat	6
Smallpox	1
Tetanus	1
Tuberculosis	28
Typhoid fever	100
Whooping cough	36

ILLINOIS	Cases
Diphtheria:	
Cook County	66
Scattering	5
Influenza	8
Measles	362
Pneumonia	78
Poliomyelitis:	
Cook County	2
Fayette County	1
Fulton County	1
Madison County	1
Vermilion County	1
Scarlet fever:	
Cook County	84
Scattering	36
Smallpox	9
Tuberculosis	268
Typhoid fever:	
Cook County	9
Franklin County	6
Scattering	23
Whooping cough	305

INDIANA	
Chicken pox	12
Diphtheria	17
Influenza	6
Measles	47
Mumps	1
Pneumonia	2
Scarlet fever	39
Smallpox	27
Tuberculosis	42
Typhoid fever	70
Whooping cough	79

IOWA	
Diphtheria	4
Scarlet fever	11
Smallpox	6

KANSAS	
Chicken pox	8
Diphtheria	9
Dysentery	2
Measles	9
Mumps	29
Pneumonia	5
Scarlet fever	29
Smallpox	9
Tuberculosis	38
Typhoid fever	30
Whooping cough	91

LOUISIANA	
Diphtheria	5
Influenza	3
Malaria	20
Pneumonia	8
Scarlet fever	3
Smallpox	3
Tuberculosis	36
Typhoid fever	50
Whooping cough	17

MAINE

	Cases
Chicken pox	3
Diphtheria	4
German measles	1
Measles	10
Mumps	28
Paratyphoid fever	1
Pneumonia	10
Scarlet fever	18
Tetanus	1
Tuberculosis	9
Typhoid fever	7
Whooping cough	12

MARYLAND

Chicken pox	13
Diphtheria	26
Dysentery	9
Foot-and-mouth disease	2
German measles	1
Influenza	6
Malaria	1
Measles	56
Mumps	36
Pneumonia (broncho)	7
Pneumonia (lobar)	7
Scarlet fever	20
Tetanus	1
Tuberculosis	53
Typhoid fever	22
Vincent's angina	1
Whooping cough	133

MASSACHUSETTS

Cerebrospinal meningitis	2
Chicken pox	47
Conjunctivitis (suppurative)	21
Diphtheria	69
German measles	66
Lethargic encephalitis	2
Malaria	1
Measles	318
Mumps	19
Ophthalmia neonatorum	25
Pellagra	1
Pneumonia (lobar)	28
Poliomyelitis	3
Scarlet fever	90
Septic sore throat	5
Tetanus	1
Trachoma	2
Tuberculosis (pulmonary)	104
Tuberculosis (other forms)	44
Typhoid fever	17
Whooping cough	128

MICHIGAN

Diphtheria	47
Measles	159
Pneumonia	39
Scarlet fever	101
Smallpox	6
Tuberculosis	47
Typhoid fever	17
Whooping cough	159

MINNESOTA

	Cases
Cerebrospinal meningitis	1
Chicken pox	60
Diphtheria	35
Influenza	1
Measles	6
Pneumonia	1
Poliomyelitis	11
Scarlet fever	83
Smallpox	7
Tuberculosis	71
Typhoid fever	8
Whooping cough	50

MISSISSIPPI

Diphtheria	3
Scarlet fever	1
Smallpox	13
Typhoid fever	37

MISSOURI

(Exclusive of Kansas City)

Diphtheria	30
Influenza	24
Malaria	6
Measles	10
Mumps	28
Ophthalmia	1
Poliomyelitis	7
Pneumonia	8
Rabies	3
Scarlet fever	58
Smallpox	12
Tetanus	1
Trachoma	72
Tuberculosis	72
Typhoid fever	39
Whooping cough	41

MONTANA

Chicken pox	3
Diphtheria	5
German measles	3
Mumps	20
Pneumonia	1
Rocky Mountain spotted fever	3
Scarlet fever	16
Smallpox	9
Tuberculosis	1
Typhoid fever	2
Whooping cough	11

NEW JERSEY

Cerebrospinal meningitis	2
Chicken pox	62
Diphtheria	71
Influenza	1
Measles	189
Paratyphoid fever	1
Pneumonia	40
Poliomyelitis	9
Scarlet fever	70
Smallpox	2
Typhoid fever	31
Whooping cough	164

NEW MEXICO

	Cases
Chicken pox	4
Diphtheria	8
Measles	1
Pellagra	1
Pneumonia	2
Rabies in man	3
Rabies in animals	6
Scarlet fever	1
Smallpox	2
Tuberculosis	34
Typhoid fever	5
Whooping cough	4

NEW YORK

Cerebrospinal meningitis	1
Diphtheria	68
Influenza	16
Malaria	14
Measles	349
Pneumonia	85
Poliomyelitis	5
Scarlet fever	113
Septic sore throat	5
Smallpox	2
Tetanus	2
Typhoid fever	32
Vincent's angina	10
Whooping cough	182

NORTH CAROLINA

Chicken pox	17
Diphtheria	15
German measles	1
Measles	3
Poliomyelitis	4
Scarlet fever	8
Smallpox	16
Trachoma	1
Typhoid fever	58
Whooping cough	124

OKLAHOMA

(Exclusive of Oklahoma City and Tulsa)

Chicken pox	9
Diphtheria	4
Influenza	8
Malaria	73
Mumps	5
Pellagra	11
Pneumonia	4
Scarlet fever:	
Wagoner	10
Scattering	19
Smallpox:	
Alfalfa	8
Scattering	13
Typhoid fever:	
Pawnee	8
Washita	11
Washington	14
Scattering	117
Whooping cough	50

OREGON

	Cases
Cerebrospinal meningitis	1
Chicken pox	8
Diphtheria	12
Measles	1
Mumps	4
Pneumonia	[1]6
Scarlet fever	7
Smallpox	15
Tuberculosis	23
Whooping cough	9

SOUTH CAROLINA

Poliomyelitis	18

SOUTH DAKOTA

Chicken pox	1
Measles	2
Scarlet fever	10
Smallpox	3

TEXAS

Cerebrospinal meningitis	1
Chicken pox	26
Diphtheria	19
Dysentery (epidemic)	20
Influenza	7
Leprosy	1
Measles	10
Mumps	14
Ophthalmia neonatorum	1
Paratyphoid fever	2
Pellagra	15
Pneumonia	3
Scarlet fever	21
Smallpox	3
Trachoma	2
Tuberculosis	30
Typhoid fever	73
Typhus fever	2
Whooping cough	10

VERMONT

Chicken pox	7
Diphtheria	2
Measles	23
Mumps	17
Scarlet fever	5
Whooping cough	4

VIRGINIA

Smallpox	3

WASHINGTON

Cerebrospinal meningitis:	
Kitsap County	1
Seattle	1
Chicken pox	36
Diphtheria	17
German measles	7
Measles	3
Mumps	21
Scarlet fever	9
Smallpox	22
Tuberculosis	44
Typhoid fever	9
Whooping cough	85

[1] Deaths.

WEST VIRGINIA

	Cases
Diphtheria	5
Poliomyelitis—Wheeling	1
Scarlet fever	7
Smallpox	6
Typhoid fever	2

WISCONSIN

	Cases
Milwaukee:	
Chicken pox	5
Diphtheria	9
Measles	30
Mumps	16
Pneumonia	8
Scarlet fever	5
Smallpox	2
Typhoid fever	1
Whooping cough	46
Scattering:	
Cerebrospinal meningitis	1
Chicken pox	46
Diphtheria	17
German measles	19
Influenza	7
Lethargic encephalitis	1
Measles	60
Mumps	31
Pneumonia	1
Poliomyelitis	2
Scarlet fever	39
Smallpox	17
Tuberculosis	29
Typhoid fever	1
Whooping cough	62

Reports for Week Ended July 4, 1925

DISTRICT OF COLUMBIA

	Cases
Chicken pox	2
Diphtheria	4
Lethargic encephalitis	1
Measles	24
Pneumonia	14
Scarlet fever	5
Tuberculosis	30
Typhoid fever	2
Whooping cough	8

NEBRASKA

	Cases
Chicken pox	6
Diphtheria	3
Measles	1
Mumps	5
Scarlet fever	2
Smallpox	5
Typhoid fever	1
Whooping cough	10

NORTH DAKOTA

	Cases
Chicken pox	5
German measles	2
Mumps	4
Pellagra	1
Pneumonia	2
Scarlet fever	17
Tuberculosis	5
Whooping cough	8

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Cerebrospinal meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
April, 1925										
Nebraska		42	69				1	66		1
Tennessee	4	42	372	56	264	19		145	221	22
May, 1925										
California	13	430	286	2	298	9	31	511	536	39
Colorado		125	9		48			122	2	10
Iowa	1	68			38		1	112	69	1
Nebraska		23	5					57		2
Utah	5	57	67		69		1	39	0	15
June, 1925										
Arizona		2			46		8	31	0	16
Connecticut	1	123	12	5	1,049		1	180	0	14
Massachusetts	10	357	22	3	3,094	2	2	563		27
Nebraska	1	26						20		3
Wisconsin	4	144	155	0	1,477	0	2	425	188	9

PLAGUE-ERADICATIVE MEASURES IN THE UNITED STATES

The following items were taken from the reports of plague-eradicative measures from the cities named:

Oakland, Calif.

(Including other East Bay communities)

2 weeks ended June 27, 1925:	
Number of rats trapped	2,920
Number of rats found to be plague infected	0
Number of squirrels examined	1,211
Number of squirrels found to be plague infected	0
Totals:	
Number of rats trapped Jan. 1 to June 27, 1925	55,731
Number of rats found to be plague infected	21
Number of squirrels examined May 1 to June 27, 1925	4,500
Number of squirrels found to be plague infected	0

Date of discovery of last plague-infected rat, Mar. 4, 1925.
Date of last human case, Sept. 10, 1919.

New Orleans, La.

2 weeks ended June 27, 1925:	
Number of vessels inspected	674
Number of inspections made	1,742
Number of vessels fumigated with cyanide gas	46
Number of rodents examined for plague	9,566
Number of rodents found to be plague infected	0
Totals, Dec. 5, 1924, to June 27, 1925:	
Number of rodents examined for plague	133,994
Number of rodents found to be plague infected	12

Date of discovery of last plague-infected rat, Jan. 17, 1925.
Date of last human case occuring in New Orleans, Aug. 20, 1920.

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

Diphtheria.—For the week ended June 27, 1925, 33 States reported 1,014 cases of diphtheria. For the week ended June 28, 1924, the same States reported 1,275 cases of diphtheria. One hundred and two cities, located in all parts of the country, and having an aggregate population of more than 28,700,000, reported 639 cases of diphtheria for the week ended June 27, 1925. Last year, for the corresponding week, they reported 891 cases. The estimated expectancy for these cities was 798 cases. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Measles.—Thirty States reported 2,901 cases of measles for the week ended June 27, 1925, and 4,341 cases of this disease for the week ended June 28, 1924. One hundred and two cities reported 1,676 cases of measles for the week this year, and 1,855 cases last year.

Scarlet fever.—Scarlet fever was reported for the week as follows: 33 States—this year, 1,233 cases; last year, 1,473 cases; 102 cities—this year, 648; last year, 713; estimated expectancy, 554 cases.

Smallpox.—For the week ended June 27, 1925, 33 States reported 442 cases of smallpox. Last year, for the corresponding week, they reported 740 cases. One hundred and two cities reported smallpox for the week as follows: 1925, 138 cases; 1924, 239 cases; estimated expectancy, 80 cases. Four deaths from smallpox were reported by these cities for the week this year—2 at Chicago, Ill., and 2 at Milwaukee, Wis.

Typhoid fever.—Six hundred and ninety-four cases of typhoid fever were reported for the week ended June 27, 1925, by 32 States. For the corresponding week of 1924 the same States reported 293 cases. One hundred and two cities reported 146 cases of typhoid fever for the week this year, and 90 cases for the corresponding week last year. The estimated expectancy for these cities was 105 cases.

Influenza and pneumonia.—Deaths from influenza and pneumonia (combined) were reported for the week by 102 cities as follows: 1925, 384 deaths; 1924, 442 deaths.

City reports for week ended June 27, 1925

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence how many cases of the disease under consideration may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding week of the preceding years. When the reports include several epidemics or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during nonepidemic years.

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1915 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland	73,129	1	2	0	0	0	2	0	0
New Hampshire:									
Concord	22,408	0	0	0	0	0	2	0	0
Manchester	81,383	0	1	0	0	0	0	0	0
Vermont:									
Barre	[1] 10,008	0	0	0	0	0	0	0	0
Burlington	23,613	0	1	1	0	0	0	4	0
Massachusetts:									
Boston	770,400	0	50	23	2	1	75	6	10
Fall River	120,912	2	3	5	1	1	7	2	1
Springfield	144,227	0	2	3	1	1	2	4	2
Worcester	191,927	1	3	7	0	0	23	0	4
Rhode Island:									
Pawtucket	68,799	0	1	0	0	0	2	0	0
Providence	242,378	0	8	4	----	0	6	0	4
Connecticut:									
Bridgeport	[1] 143,555	1	4	5	0	0	3	0	2
Hartford	[1] 138,036	0	5	4	----	0	6	0	0
New Haven	172,967	0	3	0	0	0	36	0	1

[1] Population Jan. 1, 1920.

City reports for week ended June 27, 1925—Continued

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
MIDDLE ATLANTIC									
New York:									
Buffalo	536,718	5	11	5	0	0	104	2	8
New York	5,927,625	101	232	227	1	5	169	30	86
Rochester	317,867	0	6	11	0	0	66	1	1
Syracuse	184,511	9	6	0	----	2	7	8	2
New Jersey:									
Camden	124,157	1	3	9	0	0	15	2	0
Newark	438,699	23	13	5	0	0	50	0	7
Trenton	127,390	0	4	0	0	0	1	0	4
Pennsylvania:									
Philadelphia	1,922,788	31	53	55	----	2	171	18	24
Pittsburgh	613,442	12	16	0	----	2	133	4	16
Reading	110,917	3	2	2	0	0	38	3	0
Scranton	140,636	3	3	3	0	0	4	0	3
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	406,312	2	7	6	----	0	0	2	4
Cleveland	888,519	47	20	18	0	2	44	0	4
Columbus	261,082	4	2	2	----	1	1	0	3
Toledo	268,338	34	5	2	----	0	102	1	2
Indiana:									
Fort Wayne	93,573	0	2	0	----	1	6	0	2
Indianapolis	342,718	7	5	3	----	0	18	3	1
South Bend	76,709	1	1	0	0	0	1	0	0
Terre Haute	68,939	2	1	0	0	0	13	0	0
Illinois:									
Chicago	2,886,121	58	89	48	7	2	291	27	27
Cicero	55,968	----	1	----	----	----	----	----	----
Springfield	61,833	2	1	0	0	0	23	5	0
Michigan:									
Detroit	995,668	24	42	21	4	2	9	2	10
Flint	117,968	2	3	0	0	0	8	0	1
Grand Rapids	145,947	3	2	0	0	0	57	0	4
Wisconsin:									
Madison	42,519	4	0	0	0	0	1	2	0
Milwaukee	484,595	10	11	13	0	0	69	9	9
Racine	64,393	7	1	1	0	0	0	1	0
Superior	[1] 39,671	----	0	0	0	0	0	----	0
WEST NORTH CENTRAL									
Minnesota:									
Duluth	106,289	13	1	0	----	0	3	1	3
Minneapolis	409,125	42	11	13	0	1	6	1	3
St. Paul	241,891	18	11	7	----	0	6	1	7
Iowa:									
Davenport	61,262	0	1	0	0	----	0	0	----
Sioux City	79,662	----	1	----	----	----	----	----	----
Waterloo	39,667	6	0	0	0	----	0	2	----
Missouri:									
Kansas City	351,819	7	5	3	1	1	4	5	4
St. Joseph	78,232	1	1	0	----	0	0	1	1
St. Louis	803,853	11	29	25	0	0	7	5	----
North Dakota:									
Fargo	24,841	0	1	0	0	0	0	5	1
Grand Forks	14,547	0	0	0	0	----	0	0	----
South Dakota:									
Aberdeen	15,829	1	0	2	0	----	0	0	----
Sioux Falls	29,206	0	0	2	----	0	0	0	----
Nebraska:									
Lincoln	58,761	1	1	2	0	0	1	2	1
Omaha	204,382	5	2	1	0	0	0	0	4
KANSAS:									
Topeka	52,555	7	1	2	0	0	2	10	0
Wichita	79,261	7	1	1	0	0	0	0	1

[1] Population Jan. 1, 1920.

City reports for week ended June 27, 1925—Continued

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
SOUTH ATLANTIC									
Delaware:									
Wilmington	117,728	1	1	2	0	0	19	0	1
Maryland:									
Baltimore	773,580	17	13	22	4	0	39	35	14
Cumberland	32,361	2	0	0	0	0	0	0	0
Frederick	11,301	0	0	0	0	0	0	0	0
District of Columbia:									
Washington	[1] 437,571	2	6	5	----	0	28	----	11
Virginia:									
Lynchburg	30,277	----	0	0	0	0	0	----	0
Norfolk	159,089	5	0	0	0	0	0	0	1
Richmond	181,044	0	1	2	0	0	20	0	3
Roanoke	55,502	1	1	0	----	0	6	0	1
West Virginia:									
Charleston	45,597	0	1	0	0	0	20	0	1
Huntington	57,918	0	0	0	0	----	0	0	----
Wheeling	[1] 56,208	0	1	0	----	1	4	0	1
North Carolina:									
Raleigh	29,171	1	0	0	0	0	0	0	0
Wilmington	35,719	0	0	0	0	0	0	0	0
Winston-Salem	56,230	0	0	2	0	0	1	2	1
South Carolina:									
Charleston	71,245	0	0	0	0	0	0	0	2
Columbia	39,688	0	0	0	0	0	0	0	0
Greenville	25,789	0	0	0	0	0	0	0	0
Georgia:									
Atlanta	222,963	3	1	2	3	0	0	2	9
Brunswick	15,937	0	0	0	0	0	0	0	1
Savannah	89,448	0	1	0	2	0	0	1	0
Florida:									
St. Petersburg	24,403	0	0	0	0	0	0	0	0
Tampa	56,050	----	0	----	----	----	----	----	----
EAST SOUTH CENTRAL									
Kentucky:									
Covington	57,877	0	1	0	----	0	0	0	2
Louisville	257,671	1	3	1	0	0	2	1	8
ennessee:									
Memphis	170,067	1	1	0	----	1	3	0	7
Nashville	121,128	1	0	0	----	2	18	0	3
Alabama:									
Birmingham	195,901	1	1	4	0	0	0	0	6
Mobile	63,858	0	1	1	0	0	0	0	0
Montgomery	45,383	0	0	0	0	0	0	2	0
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith	30,635	0	0	0	0	----	0	0	----
Little Rock	70,916	0	0	0	0	0	0	0	0
Louisiana:									
New Orleans	404,575	1	5	2	2	2	0	0	9
Shreveport	54,590	0	----	0	----	0	0	0	1
Oklahoma:									
Oklahoma	101,150	0	1	0	2	1	0	0	1
Tulsa	102,018	0	1	0	0	0	0	0	0
Texas:									
Dallas	177,274	1	2	2	0	0	1	0	2
Galveston	46,877	0	0	1	0	0	0	0	0
Houston	151,970	0	1	2	0	0	0	0	2
San Antonio	184,727	----	1	3	0	0	0	----	1
MOUNTAIN									
Montana:									
Billings	16,927	1	0	0	0	0	3	7	1
Great Falls	27,787	1	1	0	0	0	0	0	0
Helena	[1] 12,037	0	0	0	0	0	0	0	0
Missoula	[1] 12,668	0	0	3	0	0	0	0	1
Idaho:									
Boise	22,806	2	0	0	0	0	0	0	0

[1] Population Jan. 1, 1920.

City reports for week ended June 27, 1925—Continued

Division, State, and city	Population July 1, 1923, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
MOUNTAIN—continued									
Colorado:									
Denver	272,031	9	11	3	----	1	5	9	3
Pueblo	43,519	0	2	1	0	0	0	0	0
New Mexico:									
Albuquerque	16,648	0	1	0	0	0	0	1	0
Arizona:									
Phoenix	33,899	0	----	0	0	0	1	0	2
Utah:									
Salt Lake City	126,241	29	2	4	0	0	2	30	1
Nevada:									
Reno	12,429	0	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Seattle	[1] 315,685	32	4	4	----	----	0	29	----
Spokane	104,573	19	2	2	0	----	0	0	----
Tacoma	101,731	1	1	3	0	0	0	1	1
California:									
Los Angeles	666,853	28	35	21	4	0	12	26	8
Sacramento	69,950	6	1	1	0	0	1	0	0
San Francisco	539,038	22	20	6	1	1	5	19	4

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
NEW ENGLAND											
Maine:											
Portland	0	1	0	0	0	0	1	0	0	4	13
New Hampshire:											
Concord	0	0	0	0	0	0	0	0	0	0	5
Manchester	1	1	0	0	0	0	0	0	0	0	15
Vermont:											
Barre	0	0	0	0	0	0	0	0	0	0	0
Burlington	0	0	0	0	0	0	1	0	0	0	3
Massachusetts:											
Boston	29	20	0	0	0	13	2	4	2	33	159
Fall River	1	2	0	0	0	2	2	1	0	0	21
Springfield	3	0	0	0	0	0	1	0	0	7	30
Worcester	4	12	0	0	0	2	0	0	0	6	53
Rhode Island:											
Pawtucket	1	1	0	0	0	0	0	0	0	0	----
Providence	5	2	0	0	0	2	0	1	0	0	52
Connecticut:											
Bridgeport	4	3	0	0	0	1	0	0	0	3	21
Hartford	2	1	0	0	0	3	1	0	0	3	----
New Haven	2	1	0	0	0	1	1	1	0	24	34
MIDDLE ATLANTIC											
New York:											
Buffalo	15	13	0	0	0	13	1	1	0	5	138
New York	108	83	0	0	0	[2] 84	15	26	3	80	1,127
Rochester	6	10	0	0	0	1	0	1	0	7	60
Syracuse	6	0	0	0	0	1	0	0	0	4	36
New Jersey:											
Camden	1	0	0	0	0	0	1	0	1	3	33
Newark	13	13	0	0	0	9	0	1	0	40	86
Trenton	1	1	1	0	0	3	0	2	0	0	46
Pennsylvania:											
Philadelphia	44	37	0	0	0	35	5	3	1	79	408
Pittsburgh	14	39	0	0	0	5	1	1	1	8	135
Reading	1	1	0	0	0	0	0	0	0	13	17
Scranton	1	1	0	0	0	1	0	3	0	2	----

[1] Population Jan. 1, 1920.

[2] Pulmonary tuberculosis only.

City reports for week ended June 27, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	5	4	1	3	0	4	1	0	0	10	94
Cleveland	14	11	1	1	0	20	2	1	0	68	156
Columbus	3	0	1	2	0	6	1	1	0	7	65
Toledo	11	8	1	1	0	4	1	0	0	15	48
Indiana:											
Fort Wayne	1	0	1	0	0	2	0	1	0	0	23
Indianapolis	6	1	4	4	0	1	0	3	0	29	75
South Bend	1	3	1	0	0	0	0	0	0	2	8
Terre Haute	1	1	0	3	0	3	0	0	0	0	24
Illinois:											
Chicago	50	76	2	1	2	50	3	3	3	95	504
Cicero	0		0				0				
Springfield	1	4	1	0	0	0	0	0	0	1	19
Michigan:											
Detroit	43	75	7	2	0	16	2	2	1	58	207
Flint	2	4	1	4	0	0	1	0	0	7	17
Grand Rapids	3	20	0	1	0	1	0	0	0	12	33
Wisconsin:											
Madison	1	2	0	0	0	0	0	0	0	7	5
Milwaukee	18	4	2	3	2	9	1	1	0	43	90
Racine	2	0	0	2	0	0	0	0	0	1	5
Superior	1	5	2	1	0	0	0	0	0	0	9
WEST NORTH CENTRAL											
Minnesota:											
Duluth	2	4	3	0	0	1	0	0	0	5	23
Minneapolis	15	28	7	3	0	1	1	0	1	0	73
St. Paul	10	12	3	2	0	2	1	0	0	16	52
Iowa:											
Davenport	1	0	2	0			0	0		0	
Sioux City	1		1				0				
Waterloo	2	0	1	6			0	0		3	
Missouri:											
Kansas City	2	10	4	1	0	10	1	1	0	13	84
St. Joseph	1	0	0	0	0	1	0	0	0	2	20
St. Louis	14	30	1	2	0	9	3	3	0	35	170
North Dakota:											
Fargo	1	3	1	0	0	0	0	0	0	7	2
Grand Forks	0	0	0	0			0	0		0	
South Dakota:											
Aberdeen	1	0	0	0			0	0		3	
Sioux Falls	0	1	1	0	0	0	0	0	0	0	7
Nebraska:											
Lincoln	1	0	0	0	0	1	0	0	0	9	15
Omaha	3	0	2	4	0	5	0	1	0	2	31
Kansas:											
Topeka	1	0	1	0	0	3	1	0	0	13	15
Wichita	1	1	2	0	0	1	1	0	0	17	22
SOUTH ATLANTIC											
Delaware:											
Wilmington	2	0	0	0	0	1	0	0	0	1	20
Maryland:											
Baltimore	13	6	0	0	0	13	4	2	1	75	167
Cumberland	1	0	0	0	0	0	1	0	0	0	9
Frederick	0	0	0	0	0	0	0	0	0	0	2
Dist. of Columbia:											
Washington	7	9	0	1	0	8	3	4	0	13	100
Virginia:											
Lynchburg	0	1	1	0	0	1	0	3	0		9
Norfolk	0	0	0	0	0	4	1	0	0	5	
Richmond	1	1	0	0	0	2	1	2	0	4	43
Roanoke	0	1	0	0	0	1	0	1	0	2	18
West Virginia:											
Charleston	1	0	1	1	0	0	1	1	0	0	11
Huntington	0	0	0	7			1	0		0	
Wheeling	1	2	0	0	0	0	1	1	0	0	11
North Carolina:											
Raleigh	0	2	0	0	0	2	1	2	0	0	5
Wilmington	0	0	0	0	0	0	0	1	0	0	7
Winston-Salem	1	0	1	4	0	0	1	0	0	12	16

City reports for week ended June 27, 1925—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
SOUTH ATLANTIC—continued											
South Carolina:											
Charleston	0	0	0	0	0	0	1	0	0	0	25
Columbia	0	0	0	0	0	0	1	0	0	1	----
Greenville	0	0	1	0	0	0	1	3	0	0	2
Georgia:											
Atlanta	3	0	6	0	0	5	3	12	4	5	85
Brunswick	0	0	0	0	0	0	1	0	0	0	5
Savannah	1	0	0	0	0	1	2	0	0	1	31
Florida:											
St. Petersburg	0	0	0	2	0	0	0	0	0	0	11
Tampa	0	----	0	----	----	----	1	----	----	----	----
EAST SOUTH CENTRAL											
Kentucky:											
Covington	1	0	0	0	0	0	0	0	0	1	18
Louisville	2	5	0	1	0	7	2	5	0	9	73
Tennessee:											
Memphis	1	0	1	2	0	4	2	4	1	7	77
Nashville	1	2	1	2	0	4	4	2	0	7	59
Alabama:											
Birmingham	2	8	0	18	0	10	4	3	0	3	78
Mobile	0	1	0	0	0	1	1	2	1	2	25
Montgomery	1	0	0	0	0	0	1	0	0	0	10
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith	1	0	0	0	----	----	0	4	----	1	----
Little Rock	0	0	0	0	0	2	2	5	0	0	----
Louisiana:											
New Orleans	1	7	2	0	0	19	4	14	1	8	146
Shreveport	----	0	----	0	0	0	0	2	0	0	20
Oklahoma:											
Oklahoma	1	1	4	0	0	4	1	7	1	1	28
Tulsa	0	0	1	0	0	0	2	3	0	----	----
Texas:											
Dallas	1	3	1	0	0	2	3	2	2	9	48
Galveston	0	1	0	0	0	1	0	1	0	0	13
Houston	1	1	1	0	0	6	1	0	1	0	54
San Antonio	0	0	0	0	0	4	1	1	0	0	66
MOUNTAIN											
Montana:											
Billings	0	1	1	0	0	0	0	0	0	1	9
Great Falls	1	6	1	1	0	0	0	0	0	7	11
Helena	0	0	0	0	0	0	0	0	0	0	4
Missoula	1	0	0	0	0	0	0	0	0	0	6
Idaho:											
Boise	1	0	0	2	0	0	0	0	0	1	5
Colorado:											
Denver	7	9	0	0	0	12	1	0	1	24	78
Pueblo	1	0	0	0	0	0	0	0	0	0	13
New Mexico:											
Albuquerque	0	0	0	0	0	2	0	0	0	2	9
Arizona:											
Phoenix	----	1	----	0	0	5	----	0	0	0	28
Utah:											
Salt Lake City	2	6	1	0	0	2	0	0	0	8	30
Nevada:											
Reno	0	0	0	0	0	0	0	0	0	0	2
PACIFIC											
Washington:											
Seattle	7	2	3	17	----	----	0	3	----	52	----
Spokane	3	2	3	2	----	----	0	0	----	9	----
Tacoma	2	2	1	2	0	2	1	1	0	8	24
California:											
Los Angeles	10	19	1	36	0	30	3	1	0	50	208
Sacramento	1	0	1	0	0	1	1	1	0	0	32
San Francisco	11	12	1	2	0	14	1	1	0	24	146

City reports for week ended June 27, 1925—Continued

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
NEW ENGLAND									
Massachusetts:									
Boston	1	0	0	0	0	0	0	0	0
Rhode Island:									
Providence	0	1	1	1	0	0	0	0	0
MIDDLE ATLANTIC									
New York:									
Buffalo	0	0	0	1	0	0	0	0	0
New York	2	1	6	3	0	0	3	2	0
Syracuse	0	0	0	0	0	0	0	0	1
New Jersey:									
Newark	0	0	0	0	0	0	0	4	0
Pennsylvania:									
Philadelphia	1	0	0	0	0	0	0	0	0
EAST NORTH CENTRAL									
Ohio:									
Cleveland	1	0	2	0	0	0	0	1	0
Toledo	0	0	0	0	0	0	0	1	0
Illinois:									
Chicago	0	0	0	1	0	0	0	0	1
Michigan:									
Detroit	1	0	0	0	0	0	0	2	1
Wisconsin:									
Racine	0	0	1	1	0	0	0	0	0
WEST NORTH CENTRAL									
Minnesota:									
Minneapolis	0	0	0	1	0	0	0	1	0
St. Paul	0	0	2	0	0	0	0	0	0
Missouri:									
St. Louis	1	0	0	0	0	0	1	1	0
SOUTH ATLANTIC									
Maryland:									
Baltimore	0	0	1	1	0	0	1	1	0
District of Columbia:									
Washington	0	0	1	1	0	0	0	0	0
Virginia:									
Roanoke	0	0	0	0	0	0	0	1	0
South Carolina:									
Charleston	0	0	0	0	0	1	0	0	0
Georgia:									
Atlanta	0	0	0	0	0	1	0	0	0
EAST SOUTH CENTRAL									
Tennessee:									
Memphis	0	0	0	0	0	0	0	1	0
Alabama:									
Birmingham	0	0	0	0	0	0	0	1	0
Mobile	0	0	0	0	2	1	0	0	0
WEST SOUTH CENTRAL									
Arkansas:									
Little Rock	0	0	0	0	0	1	0	0	0
Louisiana:									
New Orleans	0	0	0	0	8	8	0	0	0
Shreveport	0	0	0	0	0	2	0	0	0
Texas:									
Dallas	0	0	0	0	1	1	0	1	0
Galveston	1	0	0	0	0	0	0	0	0
San Antonio	0	0	0	0	0	1	0	2	0
MOUNTAIN									
Arizona:									
Phoenix	0	0	0	0	0	0	----	1	1
PACIFIC									
California:									
Los Angeles	0	0	0	0	0	0	0	4	0
San Francisco	1	0	1	0	0	1	0	3	3

The following table gives the rates per hundred thousand population for 105 cities for the 10-week period ended June 27, 1925. The population figures used in computing the rates were estimated as of July 1, 1923, as this is the latest date for which estimates are available. The 105 cities reporting cases had an estimated aggregate population of nearly 29,000,000 and the 97 cities reporting deaths had more than 28,000,000 population. The number of cities included in each group and the aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, April 19 to June 27, 1925—Annual rates per 100,000 population [1]

DIPHTHERIA CASE RATES

	Week ended—									
	Apr. 25	May 2	May 9	May 16	May 23	May 30	June 6	June 13	June 20	June 27
105 cities	162	158	[3] 157	[3] 164	153	[4] 149	[3] 157	120	119	[6] 116
New England	144	127	109	154	127	114	129	94	97	127
Middle Atlantic	218	213	212	238	203	211	244	156	166	163
East North Central	113	110	113	110	108	106	99	95	93	84
West North Central	187	201	278	211	251	197	189	145	133	[7] 116
South Atlantic	108	104	104	85	87	[4] 77	[5] 93	57	51	[5] 73
East South Central	40	40	11	34	40	11	11	11	6	[8] 34
West South Central	79	70	65	56	42	65	42	70	74	46
Mountain	267	115	105	153	134	143	76	181	191	105
Pacific	165	206	[2] 123	[3] 138	165	168	145	165	113	107

MEASLES CASE RATES

105 cities	645	581	[2] 627	624	601	[4] 593	[5] 618	582	434	[6] 304
New England	1,217	1,004	984	1,188	1,051	867	872	892	634	407
Middle Atlantic	782	734	797	768	617	704	774	727	544	382
East North Central	901	761	890	854	954	913	893	844	592	[7] 404
West North Central	102	79	112	79	236	145	114	135	87	[8] 60
South Atlantic	295	305	240	329	327	[4] 256	[5] 416	297	349	[9] 285
East South Central	189	200	343	166	337	217	132	212	114	132
West South Central	37	28	32	14	23	14	23	14	19	5
Mountain	219	534	181	57	181	248	38	95	76	95
Pacific	203	162	[2] 95	[3] 178	131	165	165	87	84	52

SCARLET FEVER CASE RATES

105 cities	360	309	[2] 323	[3] 352	307	[4] 278	[5] 266	174	165	[6] 118
New England	407	430	415	358	350	211	266	179	142	107
Middle Atlantic	336	323	319	331	265	271	263	156	145	100
East North Central	433	324	366	399	413	346	317	204	217	[7] 157
West North Central	692	518	618	728	556	531	481	325	328	[8] 191
South Atlantic	175	132	106	165	146	[4] 122	[5] 132	61	61	[9] 46
East South Central	257	263	263	326	246	183	126	160	160	91
West South Central	121	111	88	74	23	65	88	46	37	56
Mountain	401	334	277	353	324	410	334	277	143	210
Pacific	148	125	[2] 151	[3] 197	162	139	151	162	116	107

[1] The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1923.
[2] Spokane, Wash., not included. Report not received at time of going to press.
[3] Tacoma, Wash., not included.
[4] Charleston, W. Va., not included.
[5] Wilmington, N. C., not included.
[6] Cicero, Ill., Sioux City, Iowa, and Tampa, Fla., not included.
[7] Cicero, Ill, not included.
[8] Sioux City, Iowa, not included.
[9] Tampa, Fla., not included.

Summary of weekly reports from cities, April 19 to June 27, 1925—Annual rates per 100,000 population—Continued

SMALLPOX CASE RATES

	Week ended—									
	Apr. 25	May 2	May 9	May 16	May 23	May 30	June 6	June 13	June 20	June 27
105 cities	62	50	[2] 46	[3] 46	60	[4] 48	[5] 46	37	36	[6] 25
New England	2	0	2	0	0	0	0	0	0	0
Middle Atlantic	12	8	6	7	2	2	4	2	1	0
East North Central	39	30	44	56	70	58	65	42	45	[7] 20
West North Central	89	75	60	79	68	70	95	52	60	[8] 39
South Atlantic	79	63	45	37	65	[4] 10	[5] 39	22	30	[9] 17
East South Central	457	435	377	189	440	423	114	297	200	132
West South Central	42	32	28	37	130	56	32	5	19	0
Mountain	29	10	48	29	29	57	38	29	19	29
Pacific	264	206	[2] 176	[3] 191	186	168	191	148	154	171

TYPHOID FEVER CASE RATES

105 cities	16	18	[2] 14	[3] 13	19	[4] 16	[5] 25	28	22	[6] 27
New England	17	10	5	12	25	17	30	25	20	17
Middle Atlantic	14	22	13	10	19	9	26	17	14	18
East North Central	7	4	9	6	5	7	10	10	4	[7] 9
West North Central	6	12	2	0	4	10	8	25	12	[8] 11
South Atlantic	14	28	28	26	39	[4] 41	[5] 41	65	49	[9] 66
East South Central	80	46	46	63	74	51	40	120	80	91
West South Central	51	51	46	79	65	74	88	116	130	148
Mountain	29	0	0	0	19	10	76	48	38	0
Pacific	23	17	[2] 9	[3] 3	6	9	9	15	6	20

INFLUENZA DEATH RATES

105 cities	30	22	15	14	14	[4] 12	[5] 11	7	6	[10] 6
New England	30	20	10	7	5	7	2	5	2	7
Middle Atlantic	17	14	10	12	11	9	11	6	4	6
East North Central	33	23	16	11	12	14	10	7	7	[7] 6
West North Central	48	31	11	11	18	18	4	9	7	4
South Atlantic	43	26	24	10	6	[4] 12	[5] 6	4	6	[9] 2
East SouthCentral	86	51	51	80	86	40	54	17	34	17
West South Central	25	31	15	20	24	31	5	20	10	10
Mountain	76	48	19	57	19	0	29	10	0	10
Pacific	12	12	16	12	25	8	12	4	4	4

PNEUMONIA DEATH RATES

105 cities	203	167	151	127	128	[4] 117	[5] 128	104	81	[10] 65
New England	186	149	161	134	119	114	72	117	62	60
Middle Atlantic	223	206	185	143	144	146	168	130	93	75
East North Central	211	148	130	125	125	119	114	89	81	[7] 42
West North Central	136	72	77	58	79	59	57	59	33	50
South Atlantic	191	195	156	136	134	[4] 157	[5] 146	122	77	[9] 95
East South Central	286	194	160	166	137	172	126	63	103	120
West South Central	158	127	138	112	84	76	66	87	92	76
Mountain	219	124	124	162	172	76	95	105	143	57
Pacific	147	127	123	78	135	82	131	49	65	53

[2] Spokane, Wash., not included. Report not received at time of going to press.
[3] Tacoma, Wash., not included.
[4] Charleston, W. Va., not included.
[5] Wilmington, N. C., not included.
[6] Cicero, Ill., Sioux City, Iowa, and Tampa., Fla., not included.
[7] Cicero, Ill., not included.
[8] Sioux City, Iowa, not included.
[9] Tampa, Fla., not included.
[10] Cicero, Ill., and Tampa, Fla., not included.

Number of cities included in summary of weekly reports and aggregate population of cities in each group, estimated as of July 1, 1923

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases	Aggregate population of cities reporting deaths
Total	105	97	28,898,350	28,140,934
New England	12	12	2,098,746	2,098,746
Middle Atlantic	10	10	10,304,114	10,304,114
East North Central	17	17	7,032,535	7,032,535
West North Central	14	11	2,515,330	2,381,454
South Atlantic	22	22	2,566,901	2,566,901
East South Central	7	7	911,885	911,885
West South Central	8	6	1,124,564	1,023,013
Mountain	9	9	546,445	546,445
Pacific	6	3	1,797,830	1,275,841

FOREIGN AND INSULAR

CANADA

Lethargic encephalitis—Halifax—June 14–20, 1925.—During the week ended June 20, 1925, a case of lethargic encephalitis was reported at Halifax, Nova Scotia, Canada.

CHINA

Cholera nostras—Tientsin—May 17–23, 1925.—During the week ended May 23, 1925, six cases of cholera nostras were reported at Tientsin, China. The cases were reported from a mission hospital.

ECUADOR

Plague—Guayaquil—June 1–15, 1925.—During the period June 1 to 15, 1925, one case of plague with one death was notified at Guayaquil, Ecuador.

Plague-infected rats—May 16–June 15, 1925.—During the period May 16 to June 15, 1925, out of 20,967 rats examined, 78 rats were found plague infected.

EGYPT

Plague—June 4–10, 1925—Summary, January 1–June 10, 1925—Comparative.—During the week ended June 10, 1925, 7 cases of plague with 4 deaths were reported in Egypt, with a total from January 1 to June 10, of 64 cases, as compared with 284 cases reported for the corresponding period of the year 1924.

MADAGASCAR

Plague—Tananarive Province—April 16–30, 1925.—During the period, April 16 to 30, 1925, 49 cases of plague with 44 deaths were reported in Tananarive Province, Island of Madagascar. The occurrence was distributed by type as follows: Bubonic, cases 30, deaths 26; pneumonic, cases 5, deaths, 4; septicemic, cases 14, deaths 14.

MALTA

Communicable diseases—June 1–15, 1925.—During the period June 1–15, 1925, cases of communicable diseases were reported in the Island of Malta as follows: Chicken pox, 20 cases; influenza, 4; lethargic encephalitis, 2; Malta (undulant) fever, 45; pneumonia, 10, including 4 cases of broncho-pneumonia; poliomyelitis (infantile paralysis), 1; scarlet fever, 2; smallpox, 2; typhoid fever, 4; whooping cough, 1. Population, estimated (civil) 223,088.

PANAMA CANAL

Communicable diseases—May, 1925.—During the month of May, 1925, communicable diseases were reported in the Canal Zone and at Colon and Panama as follows:

Disease	Canal Zone		Colon		Panama		Nonresident		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chicken pox	5		1		17				23	
Diphtheria	1		1		1				3	
Dysentery	1				5		4	1	10	1
Hookworm disease			7		35		34		76	
Leprosy	1		1						2	
Malaria	87		1	1	7		26	1	121	2
Measles	17				6				23	
Meningitis			1	1					1	1
Mumps	2								2	
Pneumonia [1]		2		3		14				19
Scarlet fever			1						1	
Tuberculosis [1]		4		6		17		1		28
Typhoid fever	[2] 3				1		1		[2] 5	
Whooping cough	2								2	

[1] Only deaths reported. [2] Three cases not bacteriologically confirmed.

CHOLERA, PLAGUE, SMALLPOX, AND TYPHUS FEVER

The reports contained in the following tables must not be considered as complete or final as regards either the lists of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended July 17, 1925 [1]

CHOLERA

Place	Date	Cases	Deaths	Remarks
India:				
Calcutta	May 17–23	70	61	
Rangoon	do	4	2	Feb. 8–14, 1925: Cases, 2; deaths, 2. Received out of date.
Siam:				
Bangkok	May 10–16	1	1	

PLAGUE

Brazil:				
Bahia	June 7–13	1	1	
Ecuador:				
Guayaquil	June 1–15	1	1	May 16–June 16, 1925: Rats examined, 20,967; found infected, 78.
Egypt				June 4–10, 1925: Cases, 7. Total, Jan. 1–June 10, 1925: Cases, 64; corresponding period 1924—cases, 284.
Province—				
Assiout	June 5	1	1	
Beni-Souef	June 10	3	1	
Charkieh	June 6–8	1	1	
Minia	June 5–6	2	1	
India:				
Rangoon	May 17–23	9	6	Feb. 8–14, 1925: Cases, 13; deaths, 13. Received out of date.
Java:				
Batavia	May 16–22	9	9	Province.
Madagascar:				
Province—				
Tananarive				Apr. 16–30, 1925: Cases, 49; deaths, 44. Bubonic, cases, 30; deaths, 26. Pneumonic, cases, 5; deaths, 4. Septicemic, cases, 14; deaths, 14.
Tananarive Town	Apr. 16–30	1	1	
Other localities	do	48	43	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, AND TYPHUS FEVER—Continued

Reports Received During Week Ended July 17, 1925—Continued

SMALLPOX

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers	May 21-31	3		May 1-31, 1925: Cases, 17; deaths, 2.
Brazil:				
Pernambuco	May 3-16	12	11	
British East Africa:				
Kenya—				
Mombasa	May 3-23	9	6	
Nairobi	May 3-9	3	2	
Tanganyika	Apr. 26-May 9	3	3	
Canada:				
New Brunswick—				
Restigouche County	June 1-30	1		
Ontario—				
Kingston	June 14-20	1		
China:				
Amoy	May 24-30		2	Very prevalent in surrounding country.
Antung	May 25-June 7	2		Present.
Canton	May 24-30			Widespread.
Chungking	do			
Hongkong	May 17-23	1		
Manchuria—				
Harbin	May 27-June 2	1		Present.
Nanking	May 30-June 6			Foreign settlement.
Shanghai	do	1		Stated to be endemic.
Swatow	do			
Tientsin	May 17-23	1		
Great Britain:				
Cardiff	June 14-20	1		
India:				
Calcutta	May 17-23	75	61	
Rangoon	do	31	20	Feb. 8-14, 1925: Cases, 87; deaths, 30. Received out of date.
Indo-China:				
Saigon	May 18-24	3	3	Including 100 square kilometers of surrounding country.
Japan:				
Nagasaki	May 25-31	2		
Java:				
Soerabaya	Apr. 30-May 6	29	4	
Malta	June 1-15	2		
Mexico:				
Guadalajara	June 23-29		5	
Persia:				
Teheran	Mar. 21-Apr. 21		11	
Siam:				
Bangkok	May 10-16	5	4	
Tunis:				
Tunis	June 4-10	3	4	

TYPHUS FEVER

Bulgaria:				
Sofia	May 28-June 3	2		
China:				
Manchuria—				
Harbin	May 19-June 2	2		
Egypt:				
Alexandria	May 28-June 3	1	1	
Cairo	Apr. 2-8	3	3	
Mexico:				
Mexico City	May 30-June 6	13		
Palestine:				
Jaffa District	June 2-8	2		
Majdal	do	2		
Union of South Africa:				
Cape Province	May 17-23			Outbreaks.
Orange Free State	do			Do.
Transvaal—				
Johannesburg	May 17-23	1		

CHOLERA, PLAGUE, SMALLPOX, AND TYPHUS FEVER—Continued

Reports Received from June 27 to July 10, 1925 [1]

CHOLERA

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers	May 11–20	1		
Ceylon				Jan. 25–Apr. 4, 1925: Cases, 10; deaths, 10.
Colombo	May 10–16	2	2	
India				Apr. 26–May 2, 1925: Cases, 5,421; deaths, 3,120.
Calcutta	May 3–9	58	49	
Rangoon	May 3–16	12	9	
Indo-China:				
Saigon	May 4–10	1	1	
Siam:				
Bangkok	Apr. 29–May 2	2	1	
Turkey:				
Constantinople	May 16–22	1		

PLAGUE

Brazil:				
Bahia	May 3–16	4	3	
British East Africa:				
Uganda	Feb. 1–28	28	28	
Ceylon:				
Colombo	May 10–16		1	
India				Apr. 26–May 2, 1925: Cases, 3,858; deaths, 3,359.
Bombay	Apr. 26–May 9	15	16	
Karachi	May 18–23	3	3	
Rangoon	May 3–16	35	31	
Indo-China:				
Cochin China—				
Saigon	Apr. 20–26	1	1	Including 100 square kilometers of surrounding country.
Java:				
Pasoeroean Residency	Mar. 7			Epidemic in one locality.
Madagascar:				
Province—				
Itasy	Apr. 1–15	1	1	
Tananarive	do	79	60	Bubonic, cases, 50; deaths, 35; pneumonic, cases 17; deaths, 13; septicemic, cases, 12; deaths, 12.
Town—				
Tamatave (port)	do	2		
Nigeria	Dec., 1924	17	13	
Do	Jan., 1925	10	6	
Siam:				
Bangkok	Apr. 26–May 9	5	5	
Straits Settlements:				
Singapore	May 3–16	7	7	

SMALLPOX

Algeria:			
Algiers	May 11–20	7	
Brazil:			
Pernambuco	Apr. 26–May 2	21	2
Rio de Janeiro	May 9–16	1	
British East Africa:			
Kenya—			
Mombasa	Apr. 19–May 2	12	3
Tanganyika Territory	Apr. 5–18	19	3
Uganda	Feb. 1–28	2	
British South Africa:			
Northern Rhodesia	Apr. 28–May 4	3	
Canada:			
British Columbia—			
Vancouver	June 1–14	5	
Ontario—			
Galt	June 14–20	2	
Saskatchewan—			
Regina	May 24–30	3	

[1] From medical officers the Public Health Service, American consuls and other sources. For reports received from Dec. 27, 1924, to June 26, 1925, see Public Health Reports for June 26, 1925. The table of epidemic diseases are terminated semiannually and new tables begun.

CHOLERA, PLAGUE, SMALLPOX, AND TYPHUS FEVER—Continued

Reports Received from June 27 to July 10, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
China:				
Amoy	May 17–23		2	Prevalent in surrounding country.
Antung	May 11–17	1		Present.
Canton	May 10–23			Do.
Chungking	May 3–23			Do.
Foochow	May 9–23			
Hongkong	Apr. 19–May 3	9	9	
Manchuria—				
Dairen	Apr. 13–May 17	82	9	
Harbin	May 13–19	1		
Nanking	May 9–30			Do.
Shanghai	May 3–23	4	2	
Swatow	May 17–23			Stated to be endemic.
Tientsin	May 9–16			Two cases reported by British municipality.
Egypt:				
Alexandria	May 21–27	1	1	
Cairo	Mar. 19–25	1		
France:				
Paris	May 21–31	1		February–March, 1925: Cases, 48.
Gold Coast				January–February, 1925: Cases, 114; deaths, 17.
Great Britain:				
England and Wales				May 24–June 6, 1925: Cases, 187.
Birmingham	June 7–13	1		
Newcastle-on Tyne	May 31–June 13	4		
Greece				January–February, 1925: Cases, 43; deaths, 6.
India				Apr. 26–May 2, 1925: Cases, 6,675; deaths, 1,719.
Bombay	Apr. 26–May 9	48	42	
Calcutta	May 3–9	109	100	
Karachi	May 18–30	2	1	
Madras	do	54	22	
Rangoon	May 3–16	98	45	
Indo-China:				
Cochin-China—				
Saigon	Apr. 20–May 17	10	6	
Irak				Jan. 11–Apr. 4, 1925: Cases, 87; deaths, 42.
Bagdad	Apr. 26–May 2	3		
Jamaica				Apr. 26–May 30, 1925: Cases, 75 (reported as alastrim).
Kingston	Apr. 26–May 30	6		Reported as alastrim.
Japan:				
Kobe	May 24–30	1		
Yokohama	May 25–31	1		
Java:				
Batavia	May 2–8	1		Province.
Rembang Residency	Apr. 23			Epidemic at Kawedanan.
Soerabaya	Apr. 16–29	64	6	
Tegal	Mar. 29–Apr. 4	2		
Mexico:				
Guadalajara	June 2–22		5	
Mexico City	May 24–30	1		Including municipalities in Federal District.
Tampico	June 1–10		1	
Morocco:				
Tangier	May 17–June 5			Present among natives.
Nigeria				December, 1924: Cases, 40; deaths, 16.
Do				January–February, 1925: Cases, 421; deaths, 11.
Poland				Mar. 1–21, 1925: Cases, 10.
Portugal:				
Lisbon	Apr. 26–June 13	35	6	
Russia				December, 1924: Cases, 880. January, 1925: Cases, 383.
Siam:				
Bangkok	Apr. 26–May 9	4	2	
Spain:				
Malaga	May 24–June 13		12	
Valencia	May 31–June 6	1		
Syria:				
Beirut	Apr. 21–30	1		
Tripoli				Jan. 3–Feb. 20, 1925: Cases, 6.
Tunis:				
Tunis	May 6–20		19	
Turkey:				
Constantinople	May 16–22	2		
Union of South Africa:				
Transvaal	May 3–9			Outbreaks.
Uruguay				December, 1924: Cases, 8.

CHOLERA, PLAGUE, SMALLPOX, AND TYPHUS FEVER—Continued

Reports Received from June 27 to July 10, 1925—Continued

TYPHUS FEVER

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers	May 11-20	6	2	In vicinity, 12 cases. Isolated.
Bulgaria				November-December, 1924: 1 case. January-March, 1925: Cases, 36; deaths, 2.
Chile:				
Valparaiso	May 10-16		1	
Egypt:				
Alexandria	May 7-13	2		
Cairo	Mar. 26-Apr. 1	1	1	
Port Said	May 14-20	1	1	
Greece				January-February, 1925: Cases, 40, deaths 4.
Athens	May 1-31		2	
Latvia				April, 1925: Cases, 12.
Mexico:				
Mexico City	May 24-30	11		Including municipalities in Federal district.
Morocco				January, 1925: Cases, 63.
Palestine:				
Majdal	May 26-June 1	1		
Ramleh	May 19-25	1		
Peru:				
Arequipa	Apr. 1-30		2	
Poland				Mar. 1-21, 1925: Cases, 592; deaths, 36.
Russia				December, 1924: Cases, 4,227. January, 1925: Cases, 3,828.
Spain:				
Valencia	June 7-13		1	
Turkey:				
Constantinople	May 11-20	6	2	
Union of South Africa:				
Cape Province	Apr. 19-May 9			Outbreaks.
Natal	May 3-9			Do.
Durban	Feb. 1-May 9	14		European.
Orange Free State	Feb. 1-Apr. 25			Outbreaks.
Transvaal	Feb. 1-Apr. 15			Do.
Yugoslavia:				
Zagreb	May 8-21	7	1	